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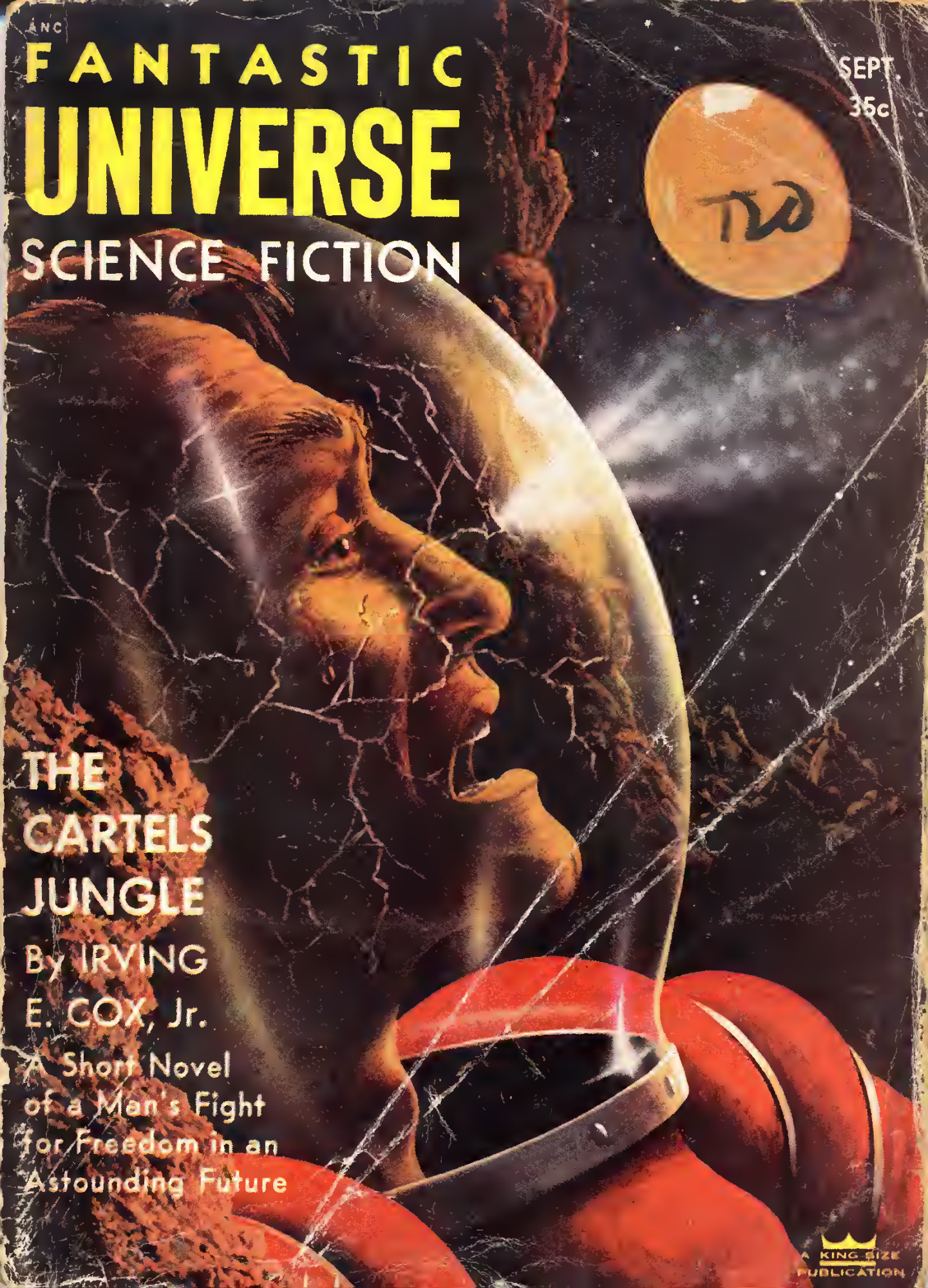
But he will die a monarch still. The singing flame of his fortitude will never be quenched this side of eternity. All hail then to the King —a man no different from other men in tomorrow's proud, unfolding scroll of star-conquests incalculable.

FRANK BELKNAP LONG

INC

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FANTASTIC UNIVERSE

SEPTEMBER, 1955
Vol. 4, No. 2

The Cartels Jungle 4
by Irving E. Cox, Jr.

The Long Voyage 38
by Carl Jacobi

Mission from Space 52
by Charles Eric Maine

Houlihan's Equation 59
by Walt Sheldon

The Doorway 67
by Evelyn E. Smith

The Undiscovered Country 72
by Algis Budrys

Rescue Squad 88
by Thomas J. O'Hara

Operation Earthworm 99
by Joe Archibald

The Hoofer 112
by Walter M. Miller, Jr.

The Sun Hunters 121
by Joe L. Hensley

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the cartels jungle

by . . . Irving E. Cox, Jr.

It was a world of greedy Dynasts —each contending for the right to pillage and enslave. But one man's valor became a shining shield.

. . . and he who overcomes an enemy by fraud is as much to be praised as he who does so by force.
Machiavelli, DISCORSI, III, 1531

THE CAPTAIN walked down the ramp carrying a lightweight bag. To a discerning eye, that bag meant only one thing: Max Hunter had quit the service. A spaceman on leave never took personal belongings from his ship, because without a bag he could by-pass the tedious wait for a customs clearance.

From the foot of the ramp a gray-haired port hand called up to Hunter, "So you're really through, Max?"

"I always said, by the time I was twenty-six—"

"Lots of guys think they'll make it. I did once myself. Look at me now. I'm no good in the ships any more, so they bust me back to port hand. It's too damn easy to throw your credits away in the crumb-joints."

In most ideally conceived Utopias the world as it exists is depicted as a mushrooming horror of maladjustment, cruelty and crime. In this startlingly original short novel that basic premise is granted, but only to pave the way for an approach to Utopia over a highway of the mind so daringly unusual we predict you'll forget completely that you're embarking on a fictional *excursion into the future by one of the most gifted writers in the field. And that forgetfulness will be accompanied by the startling realization that Irving E. Cox has a great deal more than a storyteller's magic to impart.*

"I'm getting married," Hunter replied. "Ann and I worked this out when I joined the service. Now we have the capital to open her clinic—and ninety-six thousand credits, salted away in the Solar First National Fund."

"Every youngster starts out like you did, but something always happens. The girl doesn't wait, maybe. Or he gets to thinking he can pile up credits faster in the company casinos." The old man saluted. "So long, boy. It does my soul good to meet one guy who's getting out of this crazy space racket."

Max Hunter strode along the fenced causeway toward the low, pink-walled municipal building, shimmering in the desert sun. Behind him the repair docks and the launching tubes made a ragged silhouette against the sky.

Hunter felt no romantic inclination to look back. He had always been amused by the insipid, Tri-D space operas. To Hunter it had been a business—a job different from other occupations only because the risks were greater and the bonus scale higher.

Ann would be waiting in the lobby, as she always was when he came in from a flight. But today when they left the field, it would be for keeps. Anticipation made his memory of Ann Saymer suddenly vivid—the caress of her lips, the delicate scent of her hair, her quick smile and the pert upturn of her nose.

Captain Hunter thought of Ann as small and delicate, yet neither term was strictly applicable except subjectively in relation to himself. Hunter towered a good four inches above six feet. His shoulders were broad and powerful, his hips narrow, and his belly flat and hard. He moved with the co-ordination that had become second nature to him after a decade of frontier war. He was the typical spaceman, holding a First in his profession.

As was his privilege, he still wore his captain's uniform—dress boots of black plastic, tight-fitting trousers, and a scarlet jacket bearing the gold insignia of Consolidated Solar Industries.

Hunter entered the municipal building and joined the line of people moving slowly toward the customs booth. Anxiously he scanned the mass of faces in the lobby. Ann Saymer wasn't there.

He felt the keen, knife-edge disappointment, and something else —something he didn't want to put into words. He had sent Ann a micropic telling her when his ship would be in. Of course, there was that commission-job she had taken—

Abruptly he was face to face again with the vague fear that had nagged at his mind for nearly a month. This wasn't like Ann. Always before she had sent him every two or three days a chatty micropic, using the private code they had invented to cut the unit cost of words. But four weeks had now

passed since he had last heard from her.

In an attempt at self-assurance, he recalled to mind just how exacting a commission-job could be. Perhaps Ann had been working so hard she had simply not had the time to send him a message.

Not even five minutes to send a micropic?

It didn't occur to him that she might be ill, for preventive medicine had long ago made physical disease a trivial factor in human affairs. A maladjustment then, with commitment to a city clinic? But Ann Saymer held a First in Psychiatry.

Hunter fingered the Saving Fund record in his pocket—the goal he and Ann had worked for so long. Nothing could go wrong now, nothing! He said the words over in his mind as he might have repeated the litany of a prayer, although Max Hunter did not consider himself a religious man.

At sixteen he and Ann Saymer had fallen in love, while they had both been in the last semester of the general school. They could have married then, or they might have registered for the less permanent companionship-union.

In either case, both of them would have had to go to work. Hunter could not have entered the space service, which enrolled only single men and Ann could not have afforded the university.

It hadn't mattered to Hunter. But Ann had possessed enough ambition for them both. She knew she had the ability to earn a First in Psychiatry, and would settle for nothing less. The drive that kept their goal alive was hers. She was determined to establish a clinic of her own. The plan she worked out was very practical—for Ann was in all respects the opposite of an idle dreamer.

Hunter was to join a commercial spacefleet. His bonus credits would accumulate to supply their capital, while he paid her university tuition from his current earnings. After they married, Hunter was to manage the finances of the clinic while Ann became the resident psychiatrist.

Even at sixteen Ann Saymer had very positive ideas about curing mental illness, which was the epidemic sickness of their world. Eight years later, while she was still serving her internship in a city clinic, Ann had invented the tiny machine which, with wry humor, she called an Exorciser.

She had never used the device in the public clinic. If she had, she would have lost the patent, since she had built the Exorciser while she was still serving out her educational apprenticeship in the city clinic.

"I'm no fool, Max," she told Hunter. "Why should I give it away? We'll coin credits in our own clinic with that little gadget."

Hunter had no objection to her aggressive selfishness. In fact, the term "selfishness" did not even oc-

cur to him. Ann was simply expressing the ethic of their society. He admired her brilliance, her cleverness; and he knew that her Exorciser, properly exploited, would be the touchstone to a fortune.

During one of his furloughs Ann demonstrated what the machine could do. After a minor surgical operation, a fragile filigree of microscopic platinum wires was planted in the cerebral cortex of a patient's skull. From a multi-dialed console Ann verbally transmitted a new personality directly into the maladjusted mind. After twenty minutes she removed the wire grid, and the disorganized personality was whole again, with an adjustment index testing at zero-zero.

"A cure that leaves out the long probe for psychic causes," she said enthusiastically. "In minutes, Max, we'll be able to do what now takes weeks or months. They'll swarm into our clinic."

Hunter reasoned that Ann had taken the commission-job in order to experiment with her machine in a privately-operated clinic. Her internship had ended a month before, and it had been an altogether legal thing for her to do. The fact that she had taken a commission meant she would work for only a specific contract period. And because a commission-job carried a professional classification, Ann had not been compelled to join the union.

Nevertheless the haze of anxiety still lay oppressively over Captain Hunter's mind. No matter what the requirements of Ann's commission may have been, she could have met him at the spaceport. She knew when his ship was due, and had never failed to show up before.

II

The line of people continued to move steadily toward the customs booth. Hunter stopped at last in front of a counter where a male clerk, wearing on his tunic the identification disc of his U.F.W. union local, typed out the customs forms, took Hunter's thumbprint, and carefully checked his medical certificate.

"You had your last boosters in the Mars station, is that correct?"

"Yes, last January," Hunter replied.

"That gives you an eight months' clearance." The clerk smiled. "Plenty of time for a spaceman's furlough."

"I'm making a permanent separation," Hunter affirmed.

The clerk glanced at him sharply. "Then I'd better issue a temporary health card." He ran a red-tinted, celluloid rectangle through a stamping machine and Hunter pressed his thumbprint upon the signature square. "Can you give me your home address, Captain?"

"I'll be staying at the Roost for a day or so. After that I'm getting married."

"I'll assign your health file to

the Los Angeles Clinic then," the clerk said. "You can apply for an official reassignment later, if necessary."

He made a photo-copy of the health card, pushed it into a pneumatic tube and handed the original to Hunter. Then he rolled the customs form back into the typewriter.

"Since you're quitting the service, Captain, I'll have to have additional information for the municipal file. Do you have union affiliation?"

"No. Spacemen aren't required to join the U.F.W."

"If you want to give me a part payment on the initiation fee, "I'll be glad to issue—"

"It'll be a long, hard winter before Eric Young gets any of my credits," Hunter said, his eyes narrowing. Considering how Hunter felt about the Union of Free Workers and the labor czar, Eric Young, he thought he had phrased his answer with remarkable restraint.

"Anti-labor," the clerk said, and typed the designation on the form.

"No," Hunter snapped, "and I won't be labeled that. As far as the individual goes, I believe he has every right to organize. No one can stand up against the cartels in any other way. But this exploitation by Young—"

"You either join the U.F.W., or you're against us." The clerk shrugged disinterestedly. "It's all one and the same thing to me, Captain. However, if you expect a job in the city, you'll have to get it through the union." He typed again on the customs form. "According to a new regulation, I'm obliged to classify you as unemployed, and that restricts you to limited areas of Los Angeles as well as—"

"When the hell did they put over a law like that?"

"Two weeks ago, sir. It gives the clinics a closer control over the potentially maladjusted, and it should help ease the pressure—"

"There are no exceptions?"

"The executive classifications, naturally—professionals, and spacemen. That would have included you, Captain Hunter, but you say you've left the service."

Hunter gritted his teeth. It had been like this for as long as he could remember. Whenever he returned from a long flight there was always a new form of regimentation to adjust to. And always for the same reason—to stop the steadily rising incidence of psychotic maladjustment.

"How does the law define an executive?" Hunter asked.

"Job bracket with one of the cartels," the clerk replied. "Or the total credits held on deposit with a recognized fund."

The captain flung his savings book on the counter. The clerk glanced at the balance and X'ed out the last word he had typed on the customs form.

"You qualify, sir—with a thousand credits to spare. I'll give you a city-wide clearance as an execu-

tive. But I can only make it temporary. You'll have to check once each week with the U.F.W. office. If your balance drops below ninety-five thousand, you'll be reclassified."

The clerk ran another celluloid card—this time it was blue—through the stamping machine and passed it across to Hunter. Captain Hunter picked up his bag and entered the customs booth, which by that time was empty. The probe lights glowed from the walls and ceiling, efficiently X-raying his bag and his clothing for any prohibited imports. Within seconds the alarm bell clanged and the metal doors banged shut, imprisoning Hunter in the booth.

Now what? he asked himself. What regulation had he violated this time? In his mind he inventoried the contents of his bag. If contained only a handful of personal belongings, and the tools of trade which he had needed as a captain of a fighting ship. Everything was legitimate and aboveboard. Hunter hadn't even brought Ann a souvenir from the frontier.

After a time, the booth door swung open. A senior inspector, carrying a blaster, crowded into the cubicle.

"Open your bag!" The inspector commanded, motioning with his weapon.

Hunter saw that the blaster dial was set to fire the death charge, not the weaker dispersal charge which produced only an hour's paralysis.

Hunter thumbed the photocell lock. It responded to the individual pattern of his thumbprint, and the bag fell open. The inspector picked up the worn blaster which lay under Hunter's shipboard uniform.

"Smuggling firearms, Captain, is a violation of the city code. The fine is—"

"Smuggling?" Hunter exploded. "That blaster was registered to me nine years ago." He snapped open his wallet.

The inspector frowned over the registration form, biting indecisively at his lower lip.

"That was issued before my time," he alibied. "I'll have to check the regulations. It may take a while."

He left the booth. He was gone for a quarter of an hour. When he returned, both metal doors snapped open. "Your permit is valid, Captain Hunter," the inspector admitted. "Unrestricted registrations like yours have not been issued for the past five years. That's why the probe was not adjusted to the special conditions which apply in your case. Your permit is revocable if you are committed for maladjustment."

Hunter grinned. "I wouldn't count on that. My adjustment index is zero-zero."

"A paragon, Captain." The voice was dry and biting. "But you may find conditions on the Earth a little trying. You haven't had a chance

to get really well-acquainted with your own world since you were a kid of sixteen."

Hunter's customs clearance had taken more than an hour. Before he left the municipal building, he made a quick tour of the lobby, searching again for Ann Saymer. Satisfied that she had not come, he put in a call from a public telebooth to Ann's apartment residence. After a moment, Mrs. Ames' face came into sharp focus on the screen, the light coalescing about her hair.

A warm, motherly widow of nearly eighty, Mrs. Ames had been the residence's owner for a decade, and had taken a great deal of vicarious pleasure in Ann's romance with the captain. "It's so different," she said once to Hunter, "your faith in each other, the way you work together for a goal you both want. If the rest of us could only learn to have some honest affection for each other. But, there, I'm an old woman, living too much in the past."

As soon as Hunter saw her face on the screen, he knew that something was wrong. She was tense and nervous, tied in the emotional knots of an anxiety neurosis. And Mrs. Ames was not the woman to fall easy victim to mental illness. If Hunter had been guessing the odds, he would have put her adjustment index on a par with his own.

"I haven't seen Ann for a month," she told him.

"Where is she? My last micropic from her said something about a commission-job—"

"She's all right, Max. Did you join the U.F.W.?"

"I'll be damned if I will."

Why had she asked him that? Her question seemed totally unrelated to her reassurance as to Ann—another clear symptom of her emotional unbalance.

"About Ann, Mrs. Ames," he persisted. "Do you know what clinic gave her the commission?"

Mrs. Ames stared at him in surprise. "Ann didn't tell you in her micropic?"

"We use a personal code," he explained. "That makes a certain type of communication extremely difficult."

"I didn't see her, Max. After she took the commission some men came for her things. They brought me a note from Ann, but it didn't tell me where she was. It just authorized the men to move out her belongings."

"Is the work outside of Los Angeles? Do you know that much?"

"At first I guessed—" She broke off, biting her lip, and her face twisted in an agony of intense feeling. "No, Max, an old woman's guesses won't help. I can't tell you any more about it."

"I'll come out and see you this afternoon, Mrs. Ames," he promised, "after I check in at the Roost. I want to look at that note you had from Ann."

III

Captain Hunter left the municipal building and stood on the transit platform. It was blazing hot in the noon sun, and he considered chartering an autojet to the city, as he always had before. But though a jet was faster than the monorail it was also more expensive. Acutely mindful that he had left the service and would earn no more juicy credit bonuses, he took the monorail instead.

He had only a ten-minute wait before a crowded car screamed to a stop at the port station. Hunter went aboard, along with four passengers from recent inbound flights—laboring class tourists returning from vacations on one of the planetoid resorts. Since a majority of the people who passed through the spaceport were executives or professionals, they used the autojets.

Hunter's uniform set him apart. A spaceman was expected to live high, to throw away credits like the glamor heroes on the Tri-D space dramas.

The monorail car was crowded, primarily with afternoon-shift workers on their way to the industrial area. They all wore on their tunics the discs of the Union of Free Workers. The four tourists who went aboard at the spaceport with Hunter pulled out their U.F.W. badges and pinned them on. They belonged. Hunter didn't.

He found an empty chair at the rear of the car, beside a gaudily attired woman, whose union disc proclaimed her a member of Local 47, the Recreational Companion Union. What miracles we perform, Hunter thought, with a judicial selection of innocuous words!

He glanced at the woman. She was past the first bloom of youth and her face, under her makeup, was heavily lined, her eyes shrewd and observing. Had he known that she had been shadowing him almost from the instant of his arrival in Los Angeles, and had been awaiting his return to Earth in obedience to carefully formulated instructions he would not have regarded her so complacently.

The monorail shot up toward the Palms-Pine pass of the San Jacinto Mountains. From the crest of the grade Hunter could look back at the flat, cemented field of the spaceport and the ragged teeth of the launching tubes rearing high on the Mojave. Ahead of him, misted by the blue haze of industrial smog, was Los Angeles, the capital city of Sector West—and indirectly the capital of the entire planet.

Almost indistinct against the horizon were the soaring, Babel towers, the tangled network of walk-levels, jet-ways and private landing flats, which was the center-city. The lower, bulky factory buildings squatted under the towers and spreading outward from them, like concentric rings made by a stone hurled into a quiet pool,

was the monotonous clutter of the minimum-housing.

The city sprawled from San Diego to Santa Barbara, and it lapped against the arid Mojave to the east. Beyond were the suburban homes of laborers and low-echelon executives who had carved brass-knuckled niches for themselves in the medium-income bracket.

Hunter saw the panoramic view of Sector West for only a split-second before the monorail car screamed down through the layer of gray haze. For thirty minutes the car shot across the minimum-housing area, stopping from time to time at high-platformed stations.

In the industrial district the car emptied rapidly. Only Hunter and his faded seat companion got out at the turnaround terminal and took the slideway to center-city. In the metro-entry at the top of the stairs they went through a security check station manned by six blaster-armed police guards.

Half of the guards wore the insignia of Consolidated Solar Industries and half of United Research, the two titan cartels which were locked in deadly battle for the empire beyond the stars.

The government played it safe, Hunter thought with bitterness, using an equal number of police from each organization. On Earth the pacific balance of commercial power was never disturbed—not, at least, on the surface. The two imperial giants lived side by side in a tactful display of peace.

On the frontier the real conflict raged, fought with all the weapons of treachery and an arsenal of highly refined atomic weapons—the blaster which could tear a man into component elements, and the L-bombs that were capable of turning a young sun into a nova.

The woman passed through the security check with no trouble. The men knew her and made only a perfunctory examination of her cards. But Hunter again had difficulty because of the blaster in his bag. His registered permit carried no weight with the guards. It was not their duty to execute existing law, but to protect their private employers.

However, the Consolidated insignia on Hunter's jacket made the three Consolidated guards ready to honor his permit. Eventually they persuaded the opposition to pass Hunter into the city, on the ground that the captain's zero-zero adjustment index indicated that it was safe for him to carry arms.

When Hunter went through the probe, he found the woman waiting for him. During the half-hour ride from the spaceport, he had tried twice to start a conversation with her, and failed. Now, abruptly, her face was animated with interest. She put her arm through his and walked with him to the lift shaft.

"So you got away with it, Captain." Since it was long-standing fashion, she had trained her voice to sound low-pitched and husky.

"I mean, bringing a blaster into center-city."

"Why all this fuss about a gun?" Hunter asked.

"It's a new government regulation," she told him.

"The government doesn't make the law," he reminded her. "The cartels do."

"The last fiscal mental health report showed the percentage of maladjusted—" She laughed throatily. "I wish we'd use words honestly! The survey showed the *lunatic* percentage is still increasing. The cartels are using that report as an excuse to keep the people unarmed."

Hunter was regarding her steadily. "Why?" he asked.

"We're not as content with our world as we're supposed to be," she said. "Eric Young can't keep all of us in line forever. Captain, we could use your blaster. It's next to impossible to get one these days. I could make it worth your while—"

"It's registered to me," Hunter pointed out.

"I'll change the serial," was her instant reply. "Your name wouldn't be involved."

"No, I want to keep it."

"To use yourself?"

"Don't talk nonsense," he said. "This isn't the frontier."

He made the denial vehemently, but deep in his mind he had an uncertain feeling that her guess was right. Earth was not the battleground, but it had spawned the conflict. The appearance of peace was a sham. Here the battle was fought with more subtlety, but the objective remained the same.

If Ann Saymer had somehow been caught in the no-man's-land between the two cartels— It was the first time that thought had occurred to Hunter, and it filled him with a dread foreboding.

The woman sensed his feeling. He saw a smile on her curving lips. She said softly, "So even a spaceman sometimes has his doubts."

"I left the service this morning," he said. Suddenly he was telling her all about himself and Ann. It was unwise, perhaps even dangerous. But he had to unburden himself to someone or run the risk of losing his emotional control.

"So now you've lost this—this ambitious woman of yours," she said when he had finished.

"No," he protested. "I won't let myself believe that. Once I did—"

"As well as her interesting invention—the Exorciser," she went on relentlessly. "Have you ever wondered, Captain Hunter, what might happen if the platinum grid was *not* removed from a patient's brain?"

"No, but I suppose—I suppose he'd remain in control of the operator of the transmitter."

She nodded. "He'd become a perfectly adjusted specimen with a zero-zero index, but—he'd also become a human robot with no will of his own."

"But Ann wouldn't—"

"Not Ann, Captain. Not the girl you've waited so long to marry. All she wants is a clinic of her own so that she can help the maladjusted. But don't forget—she holds a *priceless* patent. Keep your blaster, my friend. I've an idea you may need it."

He gripped her wrist. "You know something about this?"

"I know the world we live in—nothing more."

"But you're guessing—"

"Later, Captain, after you start putting some facts together on your own." She pulled away from him. "If you want to find me again—and I think you will—look for me in Number thirty-four on the amusement level. Ask for Dawn."

Suddenly, for no reason that he could explain, he had for her a great sympathy. She was no ordinary woman. Her discernment was extraordinary, and she possessed, in addition, a strangely elusive charm.

They rode the lift as it moved up through the city level in its transparent, fairy-world shaft. Dawn got out first, at the mid-city walk-way where the cheapest shops and the gaudiest entertainment houses were crammed together. Dazzling in the glare of colored lights, the mid-city never slept. It was always thronged. It was the only area of the heartland—except for the top level casinos—open to every citizen without restriction.

On the levels immediately above it were the specialty shops, dealing in luxuries for the suburbanites who had fought, schemed and bribed their way out of the minimum housing. Higher still was the sector given over to the less expensive commercial hotels.

The upper levels were occupied by cartel executive offices and at the top, high enough to escape the smog and feel the warmth of the sun, were the fabulous casino resorts, the mansions built by the family dynasts who controlled the cartels, and the modest, limestone building housing the mockery which passed as government.

IV

Captain Hunter left the lift at Level Nineteen. An automatic entry probe accepted his blue-tinted executive card, and he walked the short distance to the hotel which specialized in catering to spacemen. It was traditionally neutral ground, where the mercenaries of Consolidated or United Research met as friends, although a week before they might have been firing radiation fire at each other in the outer reaches of space. The frontier conflict was a business to the spaceman. Hunter was too well-adjusted to become emotionally involved in it himself.

The spacemen called their hotel the Roost, a contraction lifted from the public micropic code. The full name was the *Roosevelt,* lettered on the entry. The hotel was popularly supposed to have been built close to the site of a twentieth century

Los Angeles hotel of the same name, destroyed in the last convulsive war that had shattered the earth.

By micropic Hunter had made his customary reservation. His room was high in an upper floor overlooking Level Twenty-three. Through the visipanel he could see the walk-ways thronged by the various classifications of executives who worked in the central offices of the cartels—lawyers, engineers, administrators, directors, astrogeographers, designers, statisticians, researchers.

Somewhere in the crowd, perhaps, were the two men who ruled the cartels and directed the struggle for the Galactic empire. Glenn Farren of Consolidated Solar and Werner von Rausch of United Researchers. Max Hunter had never seen either of the men or any of their dynastic families. He knew little about them. Their pictures were never published.

Yet Farren and Von Rausch held in their hands more despotic power, more real wealth and military might, than any ancient Khan or Caesar had ever dreamed of.

Did they now want Ann Saymer's patent? The answer, Hunter realized, was obvious. With Ann's Exorciser, they could enslave the centers of civilization as they had enslaved the frontier. In itself that was a minor factor, already accomplished by man's acceptance of the jungle ethics of the cartels. Far more important, if one of the cartels controlled the patent, it had a weapon that would ultimately destroy the other.

With trembling fingers, Hunter took Ann's last micropic from his bag and rolled the tiny film into a wall-scanner. He could have recited it by heart; yet, by reading it again, he somehow expected to extract a new meaning. The code he and Ann used, contrived for economy rather than secrecy, was merely a telescoping of common phrases into single word symbols.

IHTKN, at the beginning, was easily interpreted as "I have taken," and COMJB became "commission-job." The micropic transmission monopoly arbitrarily limited all code words to five letters or less, counting additional letters as whole words. But because of the simplicity of the technique, some of Ann's symbols were open to a number of interpretations.

Hunter was sure of one thing. Ann had not specifically named the clinic where she was working. She said she had gone to work for the biggest—or possibly the symbol meant best—of the private clinics. Either term could apply to the clinics run by the two cartels; or, for that matter, to the largest of them all, operated by Eric Young's union.

But Ann, having invented the Exorciser, would know all its possible misuses—a factor which had not occurred to Hunter until Dawn spelled it out for him. Would Ann, then, have been fool enough to let

herself fall into the hands of the cartels?

That line of reasoning gave Hunter new hope. If one of the cartels tried to trap her, Ann would simply go into hiding. It would complicate the problem of finding her, but at least he could assure himself she was safe. Ann had brains to match her ambition. She couldn't otherwise have earned a First in Psychiatry. No, Hunter was certain the cartels didn't have her.

The telescreen buzzer gave a plaintive bleep. Hunter jerked down the response toggle. Surprisingly, the screen remained dark, but Hunter heard a man's voice say clearly, "You are anxious to find Ann Saymer, Captain Hunter?"

Apparently the transmission from Hunter's screen was unimpaired, for the speaker seemed to recognize him.

"Who is this?" Hunter asked, his mouth suddenly dry.

"A friend. We have your interest at heart, Captain. We suggest that you investigate United Researchers' clinic when you start looking for Miss Saymer."

The contact snapped off. Hunter sat down slowly, his mind reeling. Since only his screen had been neutralized, the machine was not at fault. Only a top-ranking cartel executive could arrange for a deliberate interruption of service. The rest followed logically. No one in United would have given him the information.

So Ann had fallen into their hands after all! Someone in Consolidated—perhaps Glenn Farren himself—was setting him on Ann's trail, on the chance that Hunter could find her when Consolidated's operatives had failed.

Hunter was used to the risk of long odds. He had a ten-year apprenticeship in the treachery and in-fighting of the frontier. There was a good chance that he could play one cartel against the other, and in the process get Ann away from both of them.

One more thing he wanted before he planned his opening attack against United Researchers—the note Ann had sent to Mrs. Ames. It might give him a clue as to where United had taken her. Hunter wasn't naive enough to suppose they had kept her in center-city. But perhaps she was not even in Sector West.

Each of the eleven sectors into which the Earth was divided was controlled by one of the two cartels, as an agricultural or industrial appendage of the western metropolis. It was a paternal relationship, although no comparable city had been permitted to develop and company mercenaries policed the sectors.

Children who exhibited any spark of initiative or ability were skimmed off from the hinterland to Sector West and thrown into the competitive struggle of the general school. If they fought to the top

there, they were integrated as adults into the hierarchy of the cartels.

The rest became the labor force of Sector West, enrolled in Eric Young's union and crowded into the minimum housing. The teeming millions left in the hinterland were a plodding, uninspired mass content with trivialities. They felt neither ambition nor frustration. While the number of the mentally ill continued to multiply in Sector West, only a fraction of the hinterland population suffered the mental decay.

Hunter fervently hoped United had taken Ann to one of the other sectors. Rescue would be easy. An experienced spaceman could outtalk, out-maneuver, and out-fight an entire hinterland battalion.

Max Hunter took an autojet from the Roost to Mrs. Ames' residential apartment. Conservation of his capital no longer counted, but time did. If United had Ann's patent, Ann herself was expendable. Hunter had to make his move to save her before they knew what he was up to. It would be a difficult deal to pull off in the capital city, where operatives of both cartels swarmed everywhere.

He left his blaster in his hotel room, to avoid an interrogation at any other metro-entry. Mrs. Ames' apartment residence was one place in the city where he had no need to go armed.

Just outside center-city a single street of twentieth century houses, sheltered by the Palos Verdes Hills, had survived the devastation of the last war. In the beginning the street had been preserved as a museum piece while the cartel city had grown up around it. But with each passing generation, popular interest had waned. Eventually the houses had been sold.

One was now operated by a religious cult. Two were enormously profitable party houses, where clients masqueraded in the amusing twentieth century costumes and passed a few short hours living with the quaint inconveniences of the past. The game had become so attractive that reservations were booked months in advance. The fourth relic remained unsold, slowly falling into ruin. The fifth belonged to Mrs. Ames.

To satisfy a whim—originally it was no more than that, Mrs. Ames had assured Hunter many times—she had asked her husband to buy it for her some fifty years ago. After a space-liner accident left her a widow at thirty-five, she had moved into the house as a means of psychologically withdrawing from her grief.

She never left it again. She found the old house an island in time, a magic escape from the chaos of her world.

She took in four residents because she needed their credits to augment the income from her husband's estate, and the house was then officially listed as an apartment. Chance worked her a miracle —or perhaps the house did possess

a magic of its own—for the residents were as charmed by its inconveniences as Mrs. Ames had been. Ann wouldn't consider living anywhere else, although the house was more than a mile from her university. Even Hunter felt the indefinable spell, when he was in from a flight and went to see Ann.

It was a house that invited relaxation. It was a house where time seemed to be stated in a value that could not be measured with credits. It was a house that whispered, "I saw one world fall into dust; yours is no more eternal"—and, for a moment, that whisper made the cartel-jungle meaningless.

V

Hunter left his autojet on the parking flat behind the house. He fed enough coins in the meter to hold the car for twenty-four hours. He didn't know how fast he'd want an autojet after he talked to Mrs. Ames, but he didn't want a chance passer-by to pick up his car if the charter expired.

It was necessary for him to ring a bell manually, by means of a metal button fixed to the wooden frame of the front door. No scanner announced his arrival, nor did any soundless auto-door respond to a beam transmitted from within the house. After a time Hunter heard footsteps. A strange woman —probably a new resident who had taken Ann's place—opened the door.

"I'm Captain Hunter," he said. "I came to see Mrs. Ames."

"Won't you come in, Captain?" the woman replied.

She led him into a front room which, Ann had once told him, had been called a living room. A peculiar name, surely, for the room appeared to have been designed solely as a place to sit while watching Tri-D—or flat-screen television, as it had been called in its early developmental stage when the house was new—or to hear someone play the bulky instrument known as a piano.

The room was an example of the appalling waste of space so common to the twentieth century. It was extremely spacious, but neither food tubes nor bed drawers were concealed in the walls.

Hunter had always been curious about the piano. It amazed him that it had been operated entirely by hand. There was no electric scanner to read the mood of the player and interpret it in melody. Driven to contrive his own harmonics, how could the twentieth century man have derived any satisfaction at all from music? His sensibilities had been immature, of course. But even so, an instrument which demanded so much individual creativeness must have been an enormous frustration.

Since so many surviving twentieth century machines made the same demand on the individual—their automobiles, for example, had been individually directed, without

any sort of electronic safety control —it had puzzled both Hunter and Ann that the incidence of maladjustment in the past had been so low.

The captain dropped into a comfortable, chintz-covered rocking chair—one relic in this island of time that he really enjoyed. "Will you tell Mrs. Ames I'm here?" he asked the stranger.

"I'm Mrs. Ames."

"I mean Mrs. *Janice* Ames—the owner of the house."

The woman smiled woodenly. "You're speaking to her, Captain, though I must say I don't remember ever having met you before."

"You don't remember—"

Fear clutched at his heart. He sprang up, moving toward her with clenched fists. "An hour ago I called Mrs. Ames from the spaceport. I saw her. Here—in this room."

"I've owned this house all my life, Captain." Her expression was more than good acting. She spoke with utter conviction, and seemed completely sure of herself. "You must be—" She hesitated and looked at him sharply. "Have you checked your adjustment index recently?"

"I haven't lost my mind, if that's what you're getting at," he said. "Where's Ann Saymer?"

"Believe me, please. The name is totally unfamiliar to me." The woman was painfully sympathetic —and frankly scared. She backed away from him. "You need help from the clinic, Captain. Will you let me call them for you?"

Suddenly the light fell full on her face, and Hunter saw the tiny, still-unhealed scalpel wounds on both sides of her skull. The light glowed on the microscopic filament of platinum wire clumsily left projecting through the incision.

He understood, then. This woman was wearing one of Ann's patented grids, sealed into her cerebral cortex. It made her into a robot, responding with unquestioning obedience to the direction of Ann's transmitter. And Hunter had no doubt that United manipulated the transmission.

Simultaneously he realized something else. If the cartel went to this extreme to forestall his search for Ann, she must still be alive. For some reason they still needed her. Possibly her patent drawings had been submitted for government registry in such a way that only Ann understood them.

Ann had been through the general school, and knew what the score was. She would have protected her invention—and incidentally insured her own survival—if she could have possibly done so, even at a fearful risk to herself.

Hunter swung toward the door. It did not occur to him to call the police, since they were all cartel mercenaries. Whatever he did to help Ann, he would have to do on his own. Until he found her, he could count on help from Consolidated. After that—nothing.

He jerked open the front door—and froze. Three men were waiting on the porch with drawn blasters. Hunter had no time to recognize facial features which it might have been to his advantage to remember later, no time to find any identifying insignia on their tunics. With a barely visible flickering fire arced from one of the weapons, and pain exploded in his body, unconsciousness washed into his brain.

His first sensation when the paralysis began to wear off was the dull ache of visceral nausea. He opened his eyes, and saw, bleakly shadowed, the living room of the Ames house. It was after dark, which could only mean that he had lain there nearly four hours. To knock him out for that period of time, they must have given him a nearly lethal charge from the blaster calculated just under the limit of physical endurance.

His motor control and his sense of touch returned more slowly. For a quarter of an hour he lay helpless in the chintz-covered rocker, feeling nothing but a tingling, like pin-pricks of fire, in his arms and legs.

He looked down and saw that he held a blaster in his hand—his own blaster, which he had left in his room in the Roost. He did not yet have the neural control to release his fingers from the firing dial.

As his sense of hearing was restored, he became aware that the Tri-D had been left on. The screen pictured the swirling confusion of a mob. An announcer was describing the sudden outburst of labor violence which had occurred in the industrial district that afternoon. Eric Young's U.F.W. had gone on strike against a dozen separate plants.

Essential plants, naturally. Everything was always essential, and government spokesmen always made pretty speeches deploring the situation. It was a pattern familiar to Hunter for years. One of the cartels would pay Young to strike factories belonging to the other. Then a second bribe, paid by the struck cartel, bought off the strike. Occasionally a sop of bonus credits had to be dished out to the faithful.

It was not a maneuver either Consolidated or United used frequently, because the advantage was transitory, and the only long-term winner was Eric Young.

This time there was a slight variation in the formula. Young had struck plants of both cartels. That puzzled Hunter, but any curiosity he felt was subordinate to his disgust. How much longer would this farce go on before it dawned on the rank and file of the U.F.W. that Eric Young was playing them all for suckers? Hunter tried to get up to snap off the telecast. He managed only to throw himself awkwardly over the arm of the chair.

And then he saw the body on the floor—the body of the genuine Mrs. Ames, charred by a ragged blaster wound seared through her

breast. They had murdered her—naturally with his blaster—and left him at the scene, neatly framed for the crime.

Hunter heard—right on cue—the whine of a police siren outside. Everything timed to trap him just as the motor paralysis wore off! With an effort that brought beads of sweat to his forehead, he dropped his blaster and pushed himself out of the chair. His feet were numb. He moved a few steps and banged into the piano. Clawing for support, his hands crashed in jangling discord on the keys.

The siren swelled loud in front of the house. Hunter heard the drum-beat of boots on the porch. He stumbled toward the kitchen—and fell into the arms of two police officers who had entered from the rear of the house.

He swung his fist; the fingers felt like clods of wet clay. One of the mercenaries caught his wrist and held it easily. In the gloom Hunter saw the Consolidated insignia on the man's jacket, and the guard whispered quickly, "This deal was a set-up, Hunter—packaged evidence, dropped at headquarters ten minutes ago."

Hunter stared. "Accusing me by name? Get this straight! Four hours ago they put me under with a blaster and—"

"It's a United frame," the guard said. "They want you out for good. The top brass of Consolidated is giving you the green right down the line. The fastest out Jake and I could figure—" He jerked his head toward his companion. "—was to give the United boys on our team the front of the house, and let you make a break for it from the back. We'll fake enough here to protect ourselves."

They pushed a blaster into Hunter's hands. He stumbled through the kitchen as the front door gave and two United mercenaries burst into the house. Hunter ran awkwardly, without full control of his legs.

He saw, looming black against the night shadows, the oval silhouette of the autojet on the Ames flat, still held under his twenty-four hour charter. It offered a tempting means of escape, but a public car was too easily traced and brought down by police tracers. However, it could perform a miracle as a diversion.

VI

Hunter slid into the car, punched out a destination blindly, and engaged the flight gear. With the customary roar of power, the car shot up from the flat. Hunter leaped free. His feet struck the cement. The lingering trace of paralysis, destroying his normal co-ordination, made the fall very painful.

Hunter flung himself flat in the shadow of the ornamental shrubs along the edge of the parking flat. The four police mercenaries sprinted out of the house and leaped into the police jet. With sirens scream-

ing, it soared up in pursuit of the empty autojet.

Hunter estimated that he had perhaps thirty minutes before they sent out a general alarm. A painfully small margin of safety. Where could he hide that the machines of detection—the skilled, emotionless, one-track, electronic brains—would not eventually find him? And what of Ann Saymer? What could he do as a fugitive to save her?

United had planned it all down to the smallest detail. But that was the way the cartels operated. It was the system Hunter was accustomed to. He felt neither anger nor resentment, simply a determination to out-plan and out-play the enemy.

If he accepted defeat he would admit frustration, and for Captain Max Hunter that was impossible. Hadn't he survived a decade of frontier conflict with an adjustment index of zero-zero? Instead of hopelessly weighing the odds stacked against him, he counted the advantage which a single man held in maneuverability and rapid change of pace.

He walked along the museum street, the blaster in his hand. A block away rose the bulk of a factory building and behind it towered the monster of center-city, transformed into a fairyland by the glow of lights on the many levels. Hunter's eye followed the pattern up toward the top, hidden above the blanket of haze.

The top! Luxury casinos and the castles of the cartels. Werner von Rausch and his empire of United Researchers. Werner von Rausch, who gave orders and Ann Saymer disappeared. Werner von Rausch, who gave new orders and Mrs. Ames lay murdered in her living room.

But behind the façade of his spacefleet and his private army, behind his police mercenaries, Werner von Rausch was one man—an old man, Hunter had been told—and a vulnerable target. Hunter weighed his changes, and the margin of success seemed to be balanced in his favor.

It was not what they would expect him to do. They had framed him for murder and he should now be running for his life. The hunted turned hunter. Hunter grinned savagely, enjoying his pun.

He slipped the blaster under his belt, leaving the scarlet jacket open to his navel so that the loose folds would conceal the outline of the weapon. He would have no trouble reaching the top level.

The resort casinos, like the mid-city amusement area, were open to any citizen. Special autojets, with destinations pre-set for the casino flat, were available in every monorail terminal. Hunter could by-pass a probe inspection at a regular metro-entry. The nearest terminal, from the north-coast line, was less than a quarter of a mile away.

As Hunter entered the industrial district he heard the turmoil of an angry crowd. He came upon them

suddenly, swarming at the gates of a factory close to the terminal.

Eric Young's trouble-makers, he thought with a worried frown, jumping obediently when the big boss spoke the word. In less than five years Eric Young had turned the union into a third cartel, more powerful than Consolidated or United because the commodity Young controlled—human labor—was essential to the other two.

A third cartel! Suddenly Max Hunter understood why the cartels had to have Ann's patent at any cost. The absolute control of the human mind! It was the only weapon which Consolidated or United could use to break Young's power.

Hunter shouldered his way through the strikers toward the terminal. Though he wore no U.F.W. disc, he felt no alarm. Eric Young's strike riots were always well-managed. None of the violence was real and no one was ever seriously hurt.

But these trouble-makers seemed absurdly well-disciplined. They stood in drill-team ranks, moving and shouting abuse in perfect unison. Then Hunter saw their faces, as blank as death masks—and in all their skulls the still unhealed scalpel wound, as well as an occasional projecting platinum strand which sometimes caught the reflected light.

Max Hunter felt a chill of terror. He was walking in a human graveyard of living automatons, responding to the transmission from Ann's machine. United had lost no time in putting the thing to work. This was no ordinary strike, but the opening skirmish in the conflict that would wreck both Consolidated and the Union of Free Workers.

Hunter entered the monorail terminal. It was deserted except for a woman who stood by the window looking out at the crowd. She was wearing a demure, pink dress. Her face was plain, and she had used no cosmetic plasti-skin to make it more striking. Her brown hair, streaked with a gray which she took no trouble to hide, was pulled into a bun at the back of her neck.

Surprisingly, Hunter thought she was pretty, perhaps because she was so different from the eternal, baby-faced adolescent who thronged the city in a million identical duplications.

Hunter knew he had seen her before. He couldn't remember where. She shifted her position slightly and the light cast a sharp, angular shadow on her face. Then he knew.

"Dawn!" he cried.

Startled, she turned to face him with a strange look in her eyes.

"I was hoping you wouldn't recognize me, Captain Hunter," she said.

"What are you doing here—dressed like some dowdy just in from a farm sector?" he asked, his gaze incredulous.

"We're all of us a mixture of different personalities," she replied.

"I work for an entertainment house, yes. But I also have some of the qualities of your Ann Saymer. Don't take offense, please. Ann and I are both interested in the maladjusted. She wants a quick cure. I'm looking for the cause."

"Here?"

"Wherever there are people who face an emotional crisis—the men who come to Number thirty-four, or a mob of strikers. I want to know why we react in the way we do, and what makes up the frustration pattern that crowds us across the borderline into insanity."

"You sound like a psychiatrist," he said.

"I hold a First, Captain Hunter."

"And you work in an entertainment house?"

"Tell me about yourself, Captain. Have you found Ann yet?"

He looked away quickly.

"No," he said, his face hardening.

"And you still haven't had a chance to use your blaster?"

He directed an appraising glance at her. The question might imply a great deal. Did she somehow know what had happened at Mrs. Ames'? Did she know he was a fugitive?

A dozen police mercenaries appeared abruptly at the end of the street. Since the police had never been used to break a strike, Hunter guessed that this was Consolidated's answer to Werner von Rausch's new weapon.

The mercenaries drew their blasters and ordered the mob to disperse. The automatons turned to face them. And as they turned they fell silent—the cloying, choking silence of the tomb. Like marching puppets, the mob moved toward the police. Clearly Hunter could hear a shrill voice ordering them to halt.

Hunter felt a sickening inner horror. How could the mob obey when they heard nothing but the enslaving grid, and responded to neither fear nor reason? Still they moved forward, in a robot death march. Whatever happened, it was a situation Young could turn to his advantage. If the mercenaries killed unarmed workers, it could be turned into superb propaganda. And ultimately, by sheer weight of numbers, the defenseless mob could overwhelm the mercenaries.

White fire leaped from the blasters. The first rank fell, but the mob marched blindly across the smoking corpses. The mercenaries fired again. It was slaughter—brutal and pointless—of slaves unaware of their danger, unable to save themselves.

Without understanding his own motivation—and without caring—Max Hunter leaped into the sill of the terminal window. There he was in a position to fire over the heads of the mob. The blast from his weapon arrowed into the line of police mercenaries.

Three fell in the agony of the flames. The rest, glad for an excuse to stop the slaughter, turned and fled. Like clockwork things, the

mob turned back and resumed its precision demonstration in front of the factory.

Hunter slipped white-faced into a terminal bench. His hand trembled as he jammed the blaster back beneath his belt.

"Why did you do it, Captain?" Dawn asked.

How could he answer her, without saying he had seen the grids in their skulls? And he wasn't ready to trust Dawn to that extent.

"The people couldn't help themselves," he said ambiguously.

"Because they're in the U.F.W. and Eric Young cracks the whip. Is that what you mean?"

"They weren't aware of their own danger."

"Miscalculating the risks then? But that's part of the system, Captain. If you can't fight your way up to the top—"

"Then the system is utterly vicious."

"You don't mean that," she said.

"Why not? We're living in a jungle society. It's nothing but conflict—conflict on the frontier and conflict here from the time they put you in the general school."

"Only the children who have the intelligence—"

"But why?" he interrupted fiercely. "Where does it get us?"

"We have a stable society," she told him. "Peace of a sort. Law enforcement, too, and a chance to build something better when we learn how."

"Something better?" He laughed as he stood up. "We'll get that when we pull this hell apart, and not before."

She put her hand on his arm. "No, Captain. It's not realistic to say that. Over and over again in the past we wrecked civilization because good-hearted and conscientious people thought there was no other way to create a finer world. It didn't work, because violence is madness. This time we have to begin where we are and build rationally. We can, you know, when we understand what we have to build with."

"What else do we need to know, Dawn? You're falling back on the typical double-talk of the psychiatrists. With all the application of physical science that we have—"

"I wasn't thinking of technology, Captain. Civilization isn't machines. It's people. Our accumulation of knowledge is tremendous, but essentially it means nothing because we know so little about ourselves. It's absurd to talk of making something better until we really know the individual we're making it for."

"Go ahead," he countered angrily. "Pussy-foot around with your cautious experiments, make sure nobody gets hurt—and you'll all end up slaves. As for me, I'm going to find Ann and get out while there's still time."

"Always the same two alternatives," Dawn said wearily. "Pull down the world, or run away from

it. We need the courage to try something different. We need men who will act like men. I thought, Captain, by this time—" She looked up into his eyes. "Where are you going?"

"To the top—the casinos." Her abrupt question took him off balance and almost surprised him into telling the whole truth.

"Top level." She paused, studying his face. "That's logical, of course. You'll rescue your woman and run away—perhaps to the frontier, or to a forgotten world too insignificant to be claimed by either cartel. It all sounds so easy, doesn't it? You have friends in the service. They'll smuggle you away from Sector West." She hesitated again. "Running away is insanity, too, Captain. But that is one thing you still have to learn."

VII

Max Hunter rode the autojet to the casino. As the machine rose past the city levels, he found himself thinking less about Ann and a good deal more about Dawn—a Recreational companion woman who was simultaneously a psychiatrist. Where did she really fit in the subtle battle between the titan cartels? Which of them was her ally—or did Dawn represent another element as yet unidentified?

Knowing Ann Saymer had taught Hunter a wholesome respect for the thinking of a First in Psychiatry. They operated with a deviousness that made cartel treacheries seem like child's play. He knew that Dawn had manipulated their conversation in the terminal to her own ends. Behind that deftly-phrased patter of words, what else had she tried to tell him? And what had she tried to find out? "Top level," she had said. "That's logical." Why logical? Logical to whom? Did she know where he was going and why?

The autojet thudded on the casino flat. A female attendant, robed in a skin-colored sheath bright with amber jewels, held open the cab door for him. Hunter entered the nearest casino. At the door he showed his saving record in the Solar First National Fund, and a casino teller issued him a ten thousand credit limit, the smallest denomination available. The resorts weren't wasting effort on pikers.

Although the casinos everywhere in the system were popular with spacemen, Hunter had never been to the top level before because Ann had seen to it that his surplus credits went into their savings.

It was Hunter's opinion that he hadn't missed much. The Los Angeles resorts duplicated, on an elaborate scale, the most unsavory establishments of the frontier. Anything which by any stretch of a perverted imagination could be defined as entertainment was available—at a price.

It was early and the crowd was still small. It consisted of spacemen on the usual furlough binge,

a handful of suburbanites who had hoarded a half-year's savings for this one-night fling in the big resorts, and a dozen bright-faced executives from the lower levels of the cartel hierarchy. The big brass would turn up later on, at a more fashionable hour.

At all costs, Hunter had to keep himself inconspicuous. His uniform was not entirely out of place, although Consolidated did issue its commanders a formal outfit—more gold braid, a jeweled insignia, and a jacket cut to emphasize the broad shoulders.

Hunter stopped at the snack bar and wolfed a plate of cold cuts, the first food he had eaten since morning. Then he moved indirectly across the pillared gambling pavilion, pausing at two tables to place bets. His objective was to find a vantage point in the upper floor of the casino where he could observe the geographic layout of the top level.

He slipped quickly into the dark well of an emergency stairway, feeling reasonably sure that no one had seen him leave the game room. More than half an hour had passed since he had fled Mrs. Ames' rooming house and he was convinced that very shortly—if they had not done so already—the police would put out a general alarm.

As a matter of course, there would be inquiries at the top level, but at first they would be made by police mercenaries. No one in the casino had any reason to identify Hunter as the fugitive. Later on, of course, when the police used electronic trackers, he wouldn't stand a chance. But before that happened he intended to make a deal with Werner von Rausch.

At the top of the stairs he found a tower window which afforded a crow's nest view of the top level. The twelve casinos, bright with lights, occupied more than half the area. Beyond the resort parkland was the small, white government building, dignified by its simplicity among so much ostentation. Beside it was the transparent semi-sphere housing the top landing of the center-city lifts. A third structure—a grotesque mechanical monster trapped in the heart of a spider-web of converging wires—was the power distribution center for the top level.

In back of the government building a high, metal-faced fence knifed across the level. That fence guarded the forbidden home-ground of the titans. Hunter could see the silhouette of the cartel castles rising against the sky, two gigantic masses of stone. The one on the west was Farren's; the eastern one, Von Rausch's. That much and no more was common knowledge.

Were the two families, who had fought for so long to control the empire beyond the stars, on speaking terms here? Did they observe the social amenities in the same spirit that their companies enforced the sham peace on earth? In their lonely, lofty isolation, what amuse-

ments did they enjoy? What contributed to the enrichment of the lives of those fragile beings who possessed the wealth of the galaxy?

Hunter was sure no armed guards patrolled the forbidden paradise. There was no need for them, for scanners formed a protective grid over the area. An autojet, attempting a landing from any direction, would break a beam and instantly become the target for the autoblasters erected at intervals along the fence. A man attempting to scale the wall would meet the same lethal charge.

Hunter saw one small gate with an identification screen mounted in front of it. Obviously the gate would open to the handprint of a Von Rausch or a Farren. But a stranger would find himself standing in the line of fire of two blasters, conspicuous over the gate.

The scanners, the blasters, the identification screen—all the complex, electronic watchdogs—depended solely upon power. Countless other people, Hunter knew, had realized that. Only mechanically produced power made the area invulnerable. Anyone could break through the fence. It hadn't been done before, perhaps, because no other man had ever had Hunter's motivation. None had been a fugitive on the run.

Hunter made his way out of the casino and crossed the park in the direction of the government building. Sheltered by the trees from the blaze of light, he was able to see the stars, bright in the velvet sky. The endless universe! Somewhere he could find a haven for himself and Ann, a pinprick of light in the high-arching firmament which the cartels had overlooked.

Dawn had said that running away was madness. But what alternative did he have? To stay, and attempt to make the cartel rat-race over, sweetly and rationally so that no one would be hurt? Hunter laughed bitterly. Von Rausch had the Exorciser, and he could keep it. It would be part of the bargain the captain thought he could make to save Ann. With that weapon, Von Rausch would sooner or later tear his own world to shreds. No man in his right mind would want to stay around to pick up the pieces —if any. He drew his blaster and took careful aim at the power distribution center.

The machine exploded. Burning wires sang in the air. In the casinos the lights winked out, and the entertainment machines went dark. Hunter heard the shrill screaming of the trapped crowd. He knew that it would bring the police running, but he also knew they would have arrived shortly in any case. The important thing was that the electronic watchdogs on the wall were now lifeless.

Hunter blasted open the gate, and took the path that led east.

The Von Rausch castle—and the word was scarcely a metaphor—was something lifted bodily out of a

Tri-D historical romance, complete with porticos, battlements, stone-walled towers and an imitation moat where mechanical swans floated on the dark water.

He crossed the moat on a rustic footbridge of plastic cleverly fabricated to seem like crudely hewn wood. Through a high, narrow window he saw a pale flicker of light. The pane was thick with grime.

Hunter could distinguish nothing in the room except a thin, elderly woman who seemed to be moving around a table where six candles burned in a silver candelabrum.

He kicked open the window. The woman looked at him, neither frightened nor alarmed. She was wearing an odd black dress, long-sleeved, high-necked, with a hemline that touched the floor. Her face was pale and wrinkled, unrelieved by any sort of cosmetic.

She held out her fragile hands. "You did come, Karl! I knew you wouldn't disappoint Auntie."

Hunter cried through clenched teeth, "I want Werner von Rausch. Where is he?"

"Goodness, dear, how should I know? Werner never comes to my parties."

Hunter noticed the table, then, set for eight, its gleaming silver and gold-rimmed china glowing in the soft candle light.

"Your Cousin Charlotte's already here, Karl." The woman gestured gracefully toward the table. "And little Helmig. They know how important it is to come on time."

He felt horror—and unconscious pity—as he realized the truth. Yet he tried once more to get from her the information he wanted.

"Oh, bother with Werner," she answered, pouting. "If you must know, I didn't even invite him. He's such a bore among young people."

She saw the blaster in Hunter's hand and pushed it aside gently, with a grimace of disapproval. "I don't like you to have these toys, Karl. Next thing, you'll be wanting to join the army."

Hunter flung himself out of that room, into a dark and musty hall. Behind him he heard the woman still talking, as if he had never left her. He blundered from one bleak room to another, rooms that were like tombs smelling of dust and decay.

On the second floor he came upon a small, balding man who sat reading at a desk in a room crammed with tottering stacks of old books. The light came from an antiquated electric lamp. Obviously the house had its own generating plant, independent of the power center Hunter had destroyed.

Hunter jerked up his blaster again. "Werner von Rausch?"

"One moment," the man said. Ignoring Hunter, the man quietly finished what he was reading, slipped a leather placemark into the book, and put it on top of a

stack beside the desk. The pile promptly collapsed in a cloud of dust at Hunter's feet.

Max saw some of the title pages. The books were extraordinarily old, some of them with a printing date a thousand years in the past. The man pinched a pair of eye-glasses on his nose and studied Hunter carefully.

"You're from the police, I presume?" he asked.

"If you are Werner von Rausch—"

"I'm Heinrich. I sent in the report. Though, I must say, you couldn't have come at a more inconvenient time. I'm collating the spells tonight. I have them all, right here at my fingertips. And when I'm finished—" He seized the captain's jacket and his voice was suddenly shrill. "—I'll have the power to summon up any demon from hell. Think what that means! I'll be greater than Faust. I'll have more power than—"

"Where can I find Werner von Rausch?"

"Yes, Werner. Poor boy." Heinrich was calm again. "You'll have to do your duty, officer. He's been annoying me all afternoon. So much noise—a man can't think. He's in his shop at the end of the hall. But don't be too severe with him. Perhaps this time just a warning will make him see reason."

Hunter went back to the corridor, feeling again the shadow of horror at this sick distortion of reality. In the distance, beyond the metal fence, he heard the scream of sirens, and realized he had at best another three minutes before the police would be there. Three minutes to make a deal with Werner and save Ann.

Hunter pushed back the nightmare that welled up from the depths of his mind. It wasn't true; it couldn't be true. If it were, nothing in the jungle made sense.

VIII

As he felt his way along the hall, he passed the cage of a lift, a private transit between the house and the cartel offices on the city levels below. He noted it subconsciously, as a possible means of escape. But he was through running. He could make a deal with Von Rausch. After that the police wouldn't matter.

At the end of the corridor he came upon a paneled door. Behind it he could hear the hum of a motor, and knew that he had found Werner's shop, and the source of the noise that had disturbed Heinrich's research.

Hunter flung open the door. The light was bright and gay. On the floor, a fat old man sat hunched over the remote control console of a toy monorail system. Toy space liners and fighting ships buzzed in the air.

"Werner von Rausch?" Hunter whispered.

"You've come to play with me!" The fat, old man flashed the

cherubic smile of a child. "And you brought me a blaster. Oh, let me see it! Let me see it!"

He clapped his hands eagerly.

Hunter turned and fled. The scream of the sirens still seemed no closer, but without assessing his chances Hunter sprang into the private lift. It dropped downward toward its unknown destination. What that was, Hunter didn't care. Anything to escape from so hideous a madhouse.

The Von Rausch clan: an old lady who lived with ghosts; a scholar of demonology; a patriarch lost in an eternal childhood. All of them running away into their own private fantasies.

But this was the family which ruled a cartel and directed the conquest of half the galaxy; these were the most powerful human beings who had ever lived. And they were escaping into insanity. Escaping what? Responsibility? The jungle of the cartels?

"Two alternatives," Dawn had said. "Pull down the world or run away from it." The Von Rausches had made this mess and then fled in horror from their own brutal and destructive creation.

The lift cage jerked to a stop. The door opened on a warmly lighted executive office where a white-haired man sat at a desk which had been cut from a single slab of Venusian crystal. A much enlarged projection of the United Researchers' emblem glowed from the wall. Hunter raised his weapon.

The old man gestured imperiously. "Don't be a fool, Captain. I wouldn't be here unless I had adequate protection. There are blasters in the wall, which I can trigger with a single spoken word."

"You want to finish the job your men bungled this afternoon?"

"Not our men, Captain. We got in on this deal a little late. We knew nothing about this psychiatric patent until the strikes started today."

"But Ann Saymer—"

"Unfortunately, we do not have her. It's Consolidated. We sent our men out to bring you in, Captain. We wanted your help. When you got away, it didn't occur to me that you would go to the top level. Not until we heard the report of the destruction of the power distributor. It was easy enough to anticipate your moves after that.

"If you hadn't used the private Von Rausch lift, you would have gone out again through the gate, where my men were waiting. Naturally we couldn't send them inside. You can understand why, of course."

Hunter heard only vaguely what the man was saying, for abruptly the pattern fell into place. Neither Consolidated nor United had Ann or the Exorciser. Each cartel suspected the other because they hadn't yet adjusted to the idea that a third cartel existed: Eric Young's union.

Ann's micropic had told the literal truth. She had taken her com-

mission-job with the biggest private clinic, operated by the U.F.W. It was a dead giveaway when Young struck both cartels simultaneously, if Hunter had read the data correctly.

Hunter moved toward the crystal desk. "I know where Ann is, sir," he said. "I can—"

"You can stay where you are," the old man interrupted. "One hour ago, my friend, I was ready to offer you a deal. Since then you've seen—" He raised his eyes toward the ceiling. "You've seen what's up there. Only four of us know that secret. We don't relish sharing it with a fifth."

"Unless you destroy Ann's patent, you're finished anyway."

"Destroy, Captain?" The senile voice turned silky. "No, we want that machine intact."

"If you'll guarantee Ann's safety and mine—"

"You have an exaggerated idea of your own importance. You would have been useful to us, particularly since you have been a Consolidated employee. But this thing you blundered into up there destroys your value entirely. It makes you potentially as dangerous as the Saymer patent. That's my opinion.

"The other three who share the Von Rausch secret have an equal vote in deciding the issue. They may reverse my decision. I've asked them to come here, and I'm waiting for them now."

The old man was so intent upon making a logical explanation of the death sentence he pronounced —without putting it into words— that he didn't notice Hunter edging closer to the desk. Captain Hunter saw no chance for a reprieve when the other three arrived. Why wait? Having fought on the frontier, Hunter was aware of a property of the Venusian crystal which possibly the old man did not know. It was impervious to blaster fire.

Hunter acted with the split-second timing of an experienced spaceman. He swung his body in a flying tackle against the old man's chair and in the same swift motion pushed himself into the leg cubicle carved in the crystal.

As the chair toppled and before he realized his own danger, the old man cried the code word that triggered the wall blasters. He was instantly caught in the deadly crossfire.

As the weapons slid back into the wall slots, Hunter leaped for the door, and passed quickly through it. The outer hall was empty. He sprinted for the walkway, the echoes of the blast still ringing in his ears.

A destination marker glowed above a nearby metro-entry. It told him he was on the Twenty-eighth level of center-city. On a large, public Tri-D screen Hunter saw a picture of the strike mob in the industrial area. That was all the data he needed. If the mob was still in the streets, Eric Young was still manipulating the transmitter.

Hunter took an unchartered autojet and dialed as his destination the U.F.W. clinic. It was the largest structure in the industrial area, made from luminous, pink, Martian stone, which had been imported at great cost—and with a blaze of publicity.

Completed only three years before, the U.F.W. clinic had been given a continuous flood of publicity. Numerous Tri-D public service programs had explored its wards, its laboratories, and its service centers, and even in a distant spaceship Hunter had not remained in ignorance of the build-up. The knowledge served to his advantage now, for he knew just where Young's personal penthouse was located and exactly how to reach it.

There were no armed guards or automatic probes in the clinic. Such an outward display of force wouldn't have jibed with Young's public personality. He was the much-loved official head of a union whose membership totaled millions.

Any protective device would have distorted the illusion and destroyed the legend completely.

Young's penthouse, thirty floors above street level, was the modest garden cottage which had been so widely publicized and that, too, was a part of his illusion. When Hunter saw the tiny house he was able to appreciate Young's showmanship, his insight into the mental processes of the credulous.

Hunter moved toward the door. Light glowed inside the cottage, but through the broad, front window he could see no one. He felt a momentary doubt. Had he guessed wrong? Was Young holding Ann somewhere else?

But Hunter was sure Young had not taken that precaution. It would have involved risks he would not have to contend with at the clinic, unless he had been reasonably certain he would be found out. And Young had expected to prevent that by keeping Consolidated and United at each other's throats.

Hunter kicked open the door. The three small rooms in the cottage were empty—until a man wearing a union smock emerged from the narrow galley. He hadn't been there a moment before when Hunter examined the cubicle, and there was no rear entry to the cottage.

"Mr. Young isn't here, sir." The man said, gliding swiftly toward him. "If you wish to leave a message—"

Hunter saw the telltale grid wire in the stranger's forehead. He ducked aside instinctively as the knife gleamed in the man's hand. With an odd, sighing sound, the blade arched through the air, smashing the picture window. Hunter's fist shot out, and the man dropped unconscious.

Hunter went into the galley and found what he had missed before —the false bank of food slots which masked a narrow stairway. He ran quickly down the steps, and

found the opulent living quarters Eric Young had concealed on the clinic floor beneath the innocent garden cottage. Here in gaudy splendor, in the tasteless clutter of objects assembled from every quarter of the cartel empire, was the true index to the infinite ambition of the U.F.W. boss.

A dozen men and women lurched at Hunter from an open hall. They wore white hospital robes and their foreheads were still bandaged. Obviously they were patients with recently grafted slave grids. Obedient to the transmission, they fought with a desperate, savage fury—and a clumsy lack of co-ordination which caricatured normal human behavior.

Hunter repulsed their attack without difficulty. Yet he felt an inner disgust and loathing as if he were using his strength to defeat helpless children. In two minutes it was over. One of the men was dead, his head bandage torn loose, and the grid ripped out of his skull. Three more lay sprawled out on the floor, bleeding badly from freshly opened incisions.

Hunter drew his blaster and entered the thickly-carpeted hall, glowing with the soft, pink light of the luminous, Martian stone. He cried Ann's name. His voice fell hollowly in the silence, but there was no response. He moved to the end of the hall and pushed open a narrow door.

He saw the white-tiled laboratory, Ann's transmitter standing on a long table with new platinum grids piled by the dozen beside it, and the barrack rows of hospital beds. From the angle of the room which was hidden by the half-open door, Ann Saymer ran toward him with outstretched hands, crying his name. He took a step toward her. And something struck the back of his head.

IX

Hunter's mind rocked. He felt himself falling down the long spiral into unconsciousness. The blaster slipped from his hand and his knees buckled. But he clawed blindly, with animal instinct, at the hands closing on his throat.

His head cleared. He saw Eric Young's dark face close to his. Hunter swung his fist into Young's stomach, and the hands slid away from his throat. Captain Hunter sprang to his feet, crouching low to meet Young's next attack. Young's swing went wild. Hunter's fist struck at the flabby jaw. Eric Young backed away, reeling under the hammer blows, until he came up against the laboratory table.

Suddenly he slashed at Hunter with a scalpel. The blade nicked Max's shoulder and cut across his jacket. The cloth parted, sliding down his arms and pinning his hands together. In the split-second it took Hunter to free himself from the torn jacket, Young swung the scalpel again. Hunter dodged. Miscalculating his aim, Eric Young

tripped over Hunter's outstretched leg and fell, screaming, upon the point of his own weapon.

Hunter stood for an instant with his legs spread wide, looking down at Young. Then he dropped to his knees and rolled the grievously wounded man over on his back. The hand grasping the scalpel slowly pulled the blade from the abdominal wound. Blood pulsed out upon the white tile. Young was still barely alive.

Hunter walked toward the transmitter, where Ann stood, saying nothing, her eyes wide and staring. A tremendous conflict was raging within him. Running away was no solution, but what if he could destroy the system itself? Break the mold and start anew.

He had the instrument that would do it, the hundreds of obedient slaves Young had already turned loose on the streets. With Ann's transmitter he could transform the disciplined strike of human automatons into a civic disaster. Terror and violence uprooting the foundations of the city.

But a moment's madness could not overthrow the enduring rationality of Hunter's adjustment index. To loose that horror was to set himself in judgment upon the dreams and hopes, the perversion and the sublimity, of his fellow men. To play at God—a delusion no different from Eric Young's.

Savagely Hunter lifted a chair and started to swing it at the transmitter. Instantly, Ann Saymer turned to face him, the blaster clasped tightly in her hand.

"No, Max."

"But, Ann, those people outside are in desperate danger—"

"I've gone this far. I *won't* turn back." In her voice was the familiar drive, the ambition he knew so well. But now it seemed different, a twisted distortion of something he had once admired.

"We don't need Eric Young," she said. "He's bungled everything. You and I, Max—" She caressed the transmitter affectionately. "With this, we'll possess unlimited power."

"You mean, Ann—" He choked on the words. "You came here of your own free will? You deliberately planned Mrs. Ames' murder?"

"She was dangerous, Max. She guessed too much. We knew that when we monitored the call you made from the spaceport. But in the beginning we weren't going to make you responsible. We thought the strangers in the house—your attempt to expose the other woman who called herself Mrs. Ames—would be enough to get you committed to a clinic. I didn't want you to be hurt, Max."

"Why, Ann?" His voice was dead, emotionless. "Because you loved me? Or because you wanted me to be your ace in the hole, if you failed to manage Eric Young the way you thought you could?"

"That doesn't matter now, Max, dear. I thought Eric had what I

needed. But I was misjudging *you* all along."

"You're still misjudging me, Ann. I'm going to smash this machine and afterward—"

"No you aren't, Max," she said coldly. "I'll kill you first."

Calmly she turned the dial on the blaster. He lifted the chair again, watching her face, still unable to accept what he knew was true. This was Ann Saymer, the woman he had loved. It was the same Ann whose ambition had driven her from the general school to a First in Psychiatry.

With a fighting man's instinct, Hunter calculated his chances as he held the chair high above his head. It was Ann who had to die. He would accomplish nothing if he smashed her transmitter. She knew how to build another. If he threw the chair at her rather than the Exorciser and if he threw it hard enough—

From the door a fan of flame blazed out, gently touching Ann. She stood rigid in the first muscular tension of paralysis. Hunter dropped the chair, shattering the transmitter. He turned and saw Dawn in the doorway. Somewhere deep in his subconscious mind he had expected her. He was glad she was there.

"We've known for a long time we would have to break up their little partnership," Dawn explained. "After I talked to you this morning, Captain, I persuaded the others to hold off for another day or so. A clinical experiment of my own.

"It was unkind of me, I suppose, to make you the guinea pig. But I wanted to watch your reactions while you fought your way to the truth. Now you know it all—more than you bargained for. And you know what we're trying to do. Are you willing to join us?"

He looked at her.

"In your third alternative—the cautious, rational rebuilding?"

"After men understand themselves. When we're able to answer one question: why did you and Ann Saymer, with identical backgrounds, and intelligence, and an identical socio-economic incentive, become such different personalities? What gives you a zero-zero adjustment index that nothing can shake? Not the psychiatric shock of war, Captain. Not physical pain alone or the treachery of the girl you love. We need you, Captain. We need to know what makes you tick."

"That 'we' of yours. Just what does that embrace?"

"A cross-section of us all," she told him. "Psychiatrists, executives in both cartels, union officials. We've been working at this for a good many years. We want to make our world over, yes. But this time with reason and without violence—without sacrificing the good we already have."

"And you yourself, Dawn. Who are you?"

"I represent that nonentity called the government, Captain."

"A nonentity wouldn't make you what you are, Dawn."

"My name, Captain—" She drew a long breath. "My name is Dawn Farren. The rest of my family is dying out as the Von Rausches are. Unlimited power has a way of poisoning the human mind. If wealth is our only ethical goal, what do we really have when we possess it all? Madness. Both cartels are shams, Captain Hunter, just as your frontier wars are shams.

"Yes, you may as well know that, too. Neither fleet has actually fought the other for a good many years. The planets you blast are hulks already long dead. It's all a sham, but we have to keep it alive. We have to make it *seem* real—until we're sure we've found something better and more workable for all of us."

The tension in Ann Saymer's muscles started to relax. Very slowly her body began to slump, in the secondary stage of paralysis.

"What about her?" Hunter asked. "She can still make another Exorciser—"

"The dream of enslaving mankind is *always* insanity. We'll put her in a public clinic, of course. We may have to use her own machine once more to erase the memory of its structure from her mind. After that the patent drawings will be destroyed. It's not a superficial cure for maladjustment that we're after, Captain Hunter, but the cause. All of Ann's research was up a blind alley—a brilliant waste.

Suddenly Dawn screamed a warning and leveled her blaster at Eric Young. Hunter sprang back as Dawn fired. But her timing was a second too late. In a last, blazing agony of life-before-death Young had regained consciousness long enough to hurl the scalpel at Hunter's back. Ebbing strength distorted his aim. The blade plunged into Ann's heart as she slumped against the wall.

After a long pause, Max Hunter moved toward Dawn and took her arm. He clenched his jaw tight and drew her quickly into the hall. "I want out, Dawn. There's no healing here. I won't feel free again until I can look up at the stars."

"The stars. Then you're going back to the service, Captain? You're running away?"

He didn't answer her until they stood in Eric Young's garden.

"Sham battles for shadow cartels," he said. "That's a child's subterfuge for the Tri-D space heroes. No, Dawn, the real war is here in the struggle for information about ourselves so that we can build a new world of freedom and human dignity. You say you need me. All right, Dawn, you've enrolled a recruit."

"It will be a long, slow war, Captain," she said, her eyes shining. "We may never see a victory, and—we can never make a truce. But at least we've learned how to go about solving the problem—after ten millenia of trial and error."

the long voyage

by . . . Carl Jacobi

The secret lay hidden at the end of nine landings, and Medusa-dark was one man's search for it—in the strangest journey ever made.

A SOFT gentle rain began to fall as we emerged from the dark woods and came out onto the shore. There it was, the sea, stretching as far as the eye could reach, gray and sullen, and flecked with green-white froth. The blue *hensorr* trees, crowding close to the water's edge, were bent backward as if frightened by the bleakness before them. The sand, visible under the clear patches of water, was a bleached white like the exposed surface of a huge bone.

We stood there a moment in silence. Then Mason cleared his throat huskily.

"Well, here goes," he said. "We'll soon see if we have any friends about."

He unslung the pack-sack from his shoulders, removed its protective outer shield and began to assemble the organic surveyor, an egg-shaped ball of white carponium secured to a segmented forty-foot rod. While Brandt and I raised the rod with the aid of an electric fulcrum, Mason carefully placed his control cabinet on a piece of outcropping rock and made a last adjustment.

The moment had come. Even

When we published Carl Jacobi's last story we had no assurance he would be with us so soon again. For when a uniquely gifted science-fantasy writer becomes radio-active on the entertainment meter and goes voyaging into the unknown he may be gone from the world we know for as long as yesterday's tomorrow. But Carl Jacobi has not only returned almost with the speed of light—he has brought with him shining new nuggets of wonder and surmise.

above the sound of the sea, you could hear the strained breathing of the men. Only Navigator Norris appeared unconcerned. He stood there calmly smoking his pipe, his keen blue eyes squinting against the biting wind.

Mason switched on the speaker. Its high-frequency scream rose deafeningly above us and was torn away in unsteady gusts. He began to turn its center dial, at first a quarter circle, and then all the way to the final backstop of the calibration. All that resulted was a continuation of that mournful ululation like a wail out of eternity.

Mason tried again. With stiff wrists he tuned while perspiration stood out on his forehead, and the rest of us crowded close.

"It's no use," he said. "This pickup failure proves there isn't a vestige of animal life on Stragella —on this hemisphere of the planet, at least."

Navigator Norris took his pipe from his mouth and nodded. His face was expressionless. There was no indication in the man's voice that he had suffered another great disappointment, his sixth in less than a year.

"We'll go back now," he said, "and we'll try again. There must be some planet in this system that's inhabited. But it's going to be hard to tell the women."

Mason let the surveyor rod down with a crash. I could see the anger and resentment that was gathering in his eyes. Mason was the youngest of our party and the leader of the antagonistic group that was slowly but steadily undermining the authority of the Navigator.

This was our seventh exploratory trip after our sixth landing since entering the field of the sun, Ponthis. Ponthis with its sixteen equal sized planets, each with a single satellite. First there had been Coulora; then in swift succession, Jama, Tenethon, Mokrell, and R-9. And now Stragella. Strange names of strange worlds, revolving about a strange star.

It was Navigator Norris who told us the names of these planets and traced their positions on a chart for us. He alone of our group was familiar with astrogation and cosmography. He alone had sailed the spaceways in the days before the automatic pilots were installed and locked and sealed on every ship.

A handsome man in his fortieth year, he stood six feet three with broad shoulders and a powerful frame. His eyes were the eyes of a scholar, dreamy yet alive with depth and penetration. I had never seen him lose his temper, and he governed our company with an iron hand.

He was not perfect, of course. Like all Earthmen, he had his faults. Months before he had joined with that famed Martian scientist, Ganeth-Klae, to invent that all-use material, *Indurate,* the formula for which had been stolen and which therefore had never appeared on the commercial market. Norris

would talk about that for hours. If you inadvertently started him on the subject a queer glint would enter his eyes, and he would dig around in his pocket for a chunk of the black substance.

"Did I ever show you a piece of this?" he would say. "Look at it carefully. Notice the smooth grainless texture—hard and yet not brittle. You wouldn't think that it was formed in a gaseous state, then changed to a liquid and finally to a clay-like material that could be worked with ease. A thousand years after your body has returned to dust, that piece of *Indurate* will still exist, unchanged, unworn. Erosion will have little effect upon it. Beside it granite, steel are nothing. If only I had the formula . . ."

But he had only half the formula, the half he himself had developed. The other part was locked in the brain of Ganeth-Klae, and Ganeth-Klae had disappeared. What had become of him was a mystery. Norris perhaps had felt the loss more than any one, and he had offered the major part of his savings as a reward for information leading to the scientist's whereabouts.

Our party—eighteen couples and Navigator Norris — had gathered together and subsequently left Earth in answer to a curious advertisement that had appeared in the Sunday edition of the London *Times*.

WANTED: *A group of married men and women, young, courageous, educated, tired of political and social restrictions, interested in extra-terrestrial colonization. Financial resources no qualification.*

After we had been weeded out, interviewed and rigorously questioned, Norris had taken us into the hangar, waved a hand toward the *Marie Galante* and explained the details.

The *Marie Galante* was a cruiser type ship, stripped down to essentials to maintain speed, but equipped with the latest of everything. For a short run to Venus, for which it was originally built, it would accommodate a passenger list of ninety.

But Norris wasn't interested in that kind of run. He had knocked out bulkheads, reconverted music room and ballroom into living quarters. He had closed and sealed all observation ports, so that only in the bridge cuddy could one see into space.

"We shall travel beyond the orbit of the sun," he said. "There will be no turning back for the search for a new world, a new life, is not a task for cowards."

Aside to me, he said: "You're to be the physician of this party, Bagley. So I'm going to tell you what to expect when we take off. We're going to have some mighty sick passengers aboard then."

"What do you mean, sir?" I said.

He pointed with his pipe toward the stern of the vessel. "See that . . . well, call it a booster. Ganeth-

Klae designed it just before he disappeared, using the last lot of *Indurate* in existence. It will increase our take-off speed by five times, and it will probably have a bad effect on the passengers."

So we had left Earth, at night from a field out in Essex. Without orders, without clearance papers, without an automatic pilot check. Eighteen couples and one navigator —destination unknown. If the Interstellar Council had known what Norris was up to, it would have been a case for the Spacetime Commission.

Of that long initial lap of our voyage, perhaps the less said the better. As always is the case when monotony begins to wear away the veneer of civilization, character quirks came to the surface, cliques formed among the passengers, and gossip and personalities became matters of pre-eminent importance.

Rising to the foreground out of our thirty-six, came Fielding Mason, tall, taciturn, and handsome, with a keen intellect and a sense of values remarkable in so young a man. Mason was a graduate of Montape, the French outgrowth of St. Cyr. But he had majored in military tactics, psychology and sociology and knew nothing at all about astrogation or even elemental astronomy. He too was a man of good breeding and refinement. Nevertheless conflict began to develop between him and Navigator Norris. That conflict began the day we landed on Coulora.

Norris stepped out of the air lock into the cold thin air, glanced briefly about him and faced the eighteen men assembled.

"We'll divide into three groups," he said. "Each group to carry an organic surveyor and take a different direction. Each group will so regulate its marching as to be back here without fail an hour before darkness sets in. If you find no sign of animal life, then we will take off again immediately on your return."

Mason paused halfway in the act of strapping on his pack sack.

"What's that got to do with it?" he demanded. "There's vegetation here. That's all that seems to be necessary."

Norris lit his pipe. "If you find no sign of animal life we will take off immediately on your return," he said as if he hadn't heard.

But the strangeness of Coulora tempered bad feelings then. The blue *hensorr* trees were actually not trees at all but a huge cat-tail-like growth, the stalks of which were quite transparent. In between the stalks grew curious cabbage-like plants that changed from red to yellow as an intruder approached and back to red again after he had passed. Rock outcroppings were everywhere, but all were eroded and in places polished smooth as glass.

There was a strange kind of dust that acted as though endowed with life. It quivered when trod upon, and the outline of our footsteps

slowly rose into the air, so that looking back I could see our trail floating behind us in irregular layers.

Above us the star that was this planet's sun shown bright but faintly red as if it were in the first stages of dying. The air though thin was fit to breathe, and we found it unnecessary to wear space suits. We marched down the corridors of *hensorr* trees, until we came to an open spot, a kind of glade. And that was the first time Mason tuned his organic surveyor and received absolutely nothing.

There was no animal life on Coulora!

Within an hour we had blasted off again. The forward-impact delivered by the Ganeth-Klae booster was terrific, and nausea and vertigo struck us all simultaneously. But again, with all ports and observation shields sealed shut, Norris held the secret of our destination.

On July twenty-second the ship gave that sickening lurch and came once again to a standstill.

"Same procedure as before," Norris said, stepping out of the airlock. "Those of you who desire to have their wives accompany you may do so. Mason, you'll make a final correlation on the organic surveyors. If there is no trace of animal life return here before dark."

Once our group was out of sight of the ship, Mason threw down his pack sack, sat down on a boulder and lighted a cigarette.

"Bagley," he said to me, "has the Old Man gone loco?"

"I think not," I said, frowning. "He's one of the most evenly balanced persons I know.

"Then he's hiding something," Mason said. "Why else should he be so concerned with finding animal life?"

"You know the answer to that," I said. "We're here to colonize, to start a new life. We can't very well do that on a desert."

"That's poppycock," Mason replied, flinging away his cigarette. "When the Albertson expedition first landed on Mars, there was no animal life on the red planet. Now look at it. Same thing was true when Breslauer first settled Pluto. The colonies there got along. I tell you Norris has got something up his sleeve, and I don't like it."

Later, after Mason had taken his negative surveyor reading, the flame of trouble reached the end of its fuse!

Norris had given orders to return to the *Marie Galante,* and the rest of us were sullenly making ready to start the back trail. Mason, however, deliberately seized his pick and began chopping a hole in the rock surface, preparatory apparently to erecting his plastic tent.

"We'll make temporary camp here," he said calmly. "Brandt, you can go back to the ship and bring back the rest of the women." He turned and smiled sardonically at Navigator Norris.

Norris quietly knocked the ashes

from his pipe and placed it in his pocket. He strode forward, took the pick from Mason's hands and flung it away. Then he seized Mason by the coat, whipped him around and drove his fist hard against the younger man's jaw.

"When you signed on for this voyage, you agreed to obey my orders," he said, not raising his voice. "You'll do just that."

Mason picked himself up, and there was an ugly glint in his eyes. He could have smashed Norris to a pulp, and none knew it better than the Navigator. For a brief instant the younger man swayed there on the balls of his feet, fists clenched. Then he let his hands drop, walked over and began to put on his pack sack.

But I had seen Mason's face, and I knew he had not given in as easily as it appeared. Meanwhile he began to circulate among the passengers, making no offers, yet subtly enlisting backers for a policy, the significance of which grew on me slowly. It was mutiny he was plotting! And with his personal charm and magnetism he had little trouble in winning over converts. I came upon him arguing before a group of the women one day, among them his own wife, Estelle. He was standing close to her.

"We have clothing and equipment and food concentrate," Mason said. "Enough to last two generations. We have brains and intelligence, and we certainly should be able to establish ourselves without the aid of other vertebrate forms of life.

"Coulora, Jama, Tenethon, Mekrell, R-9, and Stragella. We could have settled on any one of those planets, and apparently we should have, for conditions have grown steadily worse at each landing. But always the answer is no. Why? Because Norris says we must go on until we find animal life."

He cleared his throat and gazed at the feminine faces before him. "Go where? What makes Norris so sure he'll find life on any planet in this system? And incidentally where in the cosmos is this system?"

One of the women, a tall blonde, stirred uneasily. "What do you mean?" she said.

"I mean we don't know if our last landing was on Stragella or Coulora. I mean we don't know where we are or where we're going, and I don't think Norris does either. *We're lost!*"

That was in August. By the last of September we had landed on two more planets, to which Norris gave the simple names of R-12 and R-14. Each had crude forms of vegetable life, represented principally by the blue *hensorr* trees, but in neither case did the organic surveyor reveal the slightest traces of animal life.

There was, however, a considerable difference in physical appearance between R-12 and R-14, and for a time that fact excited Norris tremendously. Up to then, each

successive planet, although similar in size, had exhibited signs of greater age than its predecessor. But on R-12 there were definite manifestations of younger geologic development.

Several pieces of shale lay exposed under a fold of igneous rock. Two of those pieces contained fossils of highly developed *ganoids,* similar to those found on Venus. They were perfectly preserved.

It meant that animal life had existed on R-12, even if it didn't now. It meant that R-12, though a much older planet than Earth, was still younger than Stragella or the rest.

For a while Norris was almost beside himself. He cut out rock samples and carried them back to the ship. He personally supervised the tuning of the surveyors. And when he finally gave orders to take off, he was almost friendly to Mason, whereas before his attitude toward him had been one of cold aloofness.

But when we reached R-14, our eighth landing, all that passed. For R-14 was old again, older than any of the others.

And then, on October sixteenth, Mason opened the door of the locked cabin. It happened quite by accident. One of the *arelium-thaxide* conduits broke in the *Marie Galante's* central passageway, and the resulting explosion grounded the central feed line of the instrument equipment. In a trice the passageway was a sheet of flame, rapidly filling with smoke from burning insulation.

Norris, of course, was in the bridge cuddy with locked doors between us and him, and now with the wiring burned through there was no way of signalling him he was wanted for an emergency. In his absence Mason took command.

That passageway ran the full length of the ship. Midway down it was the door leading to the women's lounge. The explosion had jammed that door shut, and smoke was pouring forth from under the sill. All at once one of the women rushed forward to announce hysterically that Mason's wife, Estelle, was in the lounge.

Adjoining the lounge was a small cabin which since the beginning of our voyage had remained locked. Norris had given strict orders that that cabin was not to be disturbed. We all had taken it as a matter of course that it contained various kinds of precision instruments.

Now, however, Mason realized that the only way into the lounge was by way of that locked cabin. If he used a heat blaster on the lounge door there was no telling what would happen to the woman inside.

He ripped the emergency blaster from its wall mounting, pressed it to the magnetic latch of the sealed cabin door and pressed the stud. An instant later he was leading his frightened wife, Estelle, out through the smoke.

The fire was quickly extinguished

after that and the wiring spliced. Then when the others had drifted off, Mason called Brandt and me aside.

"We've been wondering for a long time what happened to Ganeth-Klae, the Martian inventor who worked with Norris to invent *Indurate,*" he said very quietly. "Well, we don't need to wonder any more. He's in there."

Brandt, and I stepped forward over the sill—and drew up short. Ganeth-Klae was there all right, but he would never trouble himself about making a voyage in a locked cabin. His rigid body was encased in a transparent block of amber-colored solidifex, the after-death preservative used by all Martians.

Both of us recognized his still features at once, and in addition his name-tattoo, required by Martian law, was clearly visible on his left forearm.

For a brief instant the discovery stunned us. Klae dead? Klae whose IQ had become a measuring guide for the entire system, whose Martian head held more ordinary horse sense, in addition to radical postulations on theoretical physics, than anyone on the planets. It wasn't possible.

And what was the significance of his body on Norris' ship? Why had Norris kept its presence a secret and why had he given out the story of Klae's disappearance?

Mason's face was cold as ice. "Come with me, you two," he said. "We're going to get the answer to this right now."

We went along the passage to the circular staircase. We climbed the steps, passed through the scuttle and came to the door of the bridge cuddy. Mason drew the bar and we passed in. Norris was bent over the chart table. He looked up sharply at the sound of our steps.

"What is the meaning of this intrusion?" he said.

It didn't take Mason long to explain. When he had finished, he stood there, jaw set, eyes smouldering.

Norris paled. Then quickly he got control of himself, and his old bland smile returned.

"I expected you to blunder into Klae's body one of these days," he said. "The explanation is quite simple. Klae had been ill for many months, and he knew his time was up. His one desire in life was to go on this expedition with me, and he made me promise to bury him at the site of our new colony. The pact was between him and me, and I've followed it to the letter, telling no one."

Mason's lips curled in a sneer. "And just what makes you think we're going to believe that story?" he demanded.

Norris lit a cigar. "It's entirely immaterial to me whether you believe it or not."

But the story *was* believed, especially by the women, to whom the romantic angle appealed and Ma-

son's embryonic mutiny died without being born, and the *Marie Galante* sailed on through uncharted space toward her ninth and last landing.

As the days dragged by and no word came from the bridge cuddy, restlessness began to grow amongst us. Rumor succeeded rumor, each story wilder and more incredible than the rest. Then just as the tension had mounted to fever pitch, there came the sickening lurch and grinding vibration of another landing.

Norris dispensed with his usual talk before marching out from the ship. After testing the atmosphere with the ozonometer, he passed out the heat pistols and distributed the various instruments for computing radioactivity and cosmic radiation.

"This is the planet, Nizar," he said shortly. "Largest in the field of the sun, Ponthis. You will make your survey as one group this time. I will remain here."

He stood watching us as we marched off down the cliff side. Then the blue *hensorr* trees rose up to swallow him from view. Mason swung along at the head of our column, eyes bright, a figure of aggressive action. We had gone but a hundred yards when it became apparent that as a planet Nizar was entirely different from its predecessors. There was considerable top soil, and here grew a tall reed-shaped plant that gave off varying chords of sound when the wind blew.

It was as if we were progressing through the nave of a mighty church with a muted organ in the distance. There was animal life too, a strange lizard-like bird that rose up in flocks ahead of us and flew screaming overhead.

"I don't exactly like it, Bagley," he said. "There's something unwholesome about this planet. The evolution is obviously in an early state of development, but I get the impression that it has gone backward; that the planet is really old and has reverted to its earlier life."

Above us the sky was heavily overcast, and a tenuous white mist rising up from the *hensorr* trees formed curious shapes and designs. In the distance I could hear the swashing of waves on a beach.

Suddenly Mason stopped. "Look!" he said.

Below us stretched the shore of a great sea. But it was the structure rising up from that shore that drew a sharp exclamation from me. Shaped in a rough ellipse, yet mounted high toward a common point, was a large building of multiple hues and colors. The upper portion was eroded to crumbling ruins, the lower part studded with many bas-reliefs and triangular doorways.

"Let's go," Mason said, breaking out into a fast loping run.

The building was farther away than we had thought, but when we finally came up to it, we saw that it was even more of a ruin than it had at first appeared. It was

only a shell with but two walls standing, alone and forlorn. Whatever race had lived here, they had come and gone.

We prowled about the ruins for more than an hour. The carvings on the walls were in the form of geometric designs and cabalistic symbols, giving no clue to the city's former occupants' identity.

And then Mason found the stairs leading to the lower crypts. He switched on his ato-flash and led the way down cautiously. Level one . . . level two . . . three . . . we descended lower and lower. Here water from the nearby sea oozed in little rivulets that glittered in the light of the flash.

We emerged at length on a wide underground plaissance, a kind of amphitheater, with tier on tier of seats surrounding it and extending back into the shadows.

"Judging from what we've seen," Mason said, "I would say that the race that built this place had reached approximately a grade C-5 of civilization, according to the Mokart scale. This apparently was their council chamber."

"What are those rectangular stone blocks depending from the ceiling?" I said.

Mason turned the light beam upward. "I don't know," he said. "But my guess is that they are burial vaults. Perhaps the creatures were ornithoid."

Away from the flash the floor of the plaissance appeared to be a great mirror that caught our reflections and distorted them fantastically and horribly. We saw then that it was a form of living mold, composed of millions of tiny plants, each with an eye-like iris at its center. Those eyes seemed to be watching us, and as we strode forward, a great sigh rose up, as if in resentment at our instrusion.

There was a small triangular dais in the center of the chamber, and in the middle of it stood an irregular black object. As we drew nearer, I saw that it had been carved roughly in the shape of this central building and that it was in a perfect state of preservation.

Mason walked around this carving several times, examining it curiously.

"Odd," he said. "It looks to be an object of religious veneration, but I never heard before of a race worshipping a replica of their own living quarters."

Suddenly his voice died off. He bent closer to the black stone, studying it in the light of the powerful *ato* flash. He got a small magnifying glass out of his pocket and focused it on one of the miniature bas reliefs midway toward the top of the stone. Unfastening his geologic hammer from his belt, he managed, with a sharp, swinging blow, to break off a small protruding piece.

He drew in his breath sharply, and I saw his face go pale. I stared at him in alarm.

"What's wrong?" I asked.

He motioned that I follow and

led the way silently past the others toward the stair shaft. Climbing to the top level was a heart-pounding task, but Mason almost ran up those steps. At the surface he leaned against a pillar, his lips quivering spasmodically.

"Tell me I'm sane, Bagley," he said huskily. "Or rather, don't say anything until we've seen Norris. Come on. We've got to see Norris."

All the way back to the *Marie Galante,* I sought to soothe him, but he was a man possessed. He rushed up the ship's gangway, burst into central quarters and drew up before Navigator Norris like a runner stopping at the tape.

"You damned lying hypocrite!" he yelled.

Norris looked at him in his quiet way. "Take it easy, Mason," he said. "Sit down and explain yourself."

But Mason didn't sit down. He thrust his hand in his pocket, pulled out the piece of black stone he had chipped off the image in the cavern and handed it to Norris.

"Take a look at that!" he demanded.

Norris took the stone, glanced at it and laid it down on his desk. His face was emotionless. "I expected this sooner or later," he said. "Yes, it's *Indurate* all right. Is that what you want me to say?"

There was a dangerous fanatical glint in Mason's eyes now. With a sudden quick motion he pulled out his heat pistol.

"So you tricked **us!**" he snarled. "Why? I want to know why."

I stepped forward and seized Mason's gun hand. "Don't be a fool," I said. "It can't be that important."

Mason threw back his head and burst into an hysterical peal of laughter. "Important!" he cried. "Tell him how important it is, Norris. *Tell him.*"

Quietly the Navigator filled and lighted his pipe. "I'm afraid Mason is right," he said. "I did trick you. Not purposely, however. And in the beginning I had no intention of telling anything but the truth. Actually we're here because of a dead man's vengeance."

Norris took his pipe from his lips and stared at it absently.

"You'll remember that Ganeth-Klae, the Martian, and I worked together to invent *Indurate.* But whereas I was interested in the commercial aspects of that product, Klae was absorbed only in the experimental angle of it. He had some crazy idea that it should not be given to the general public at once but rather should be allocated for the first few years to a select group of scientific organizations. You see, *Indurate* was such a departure from all known materials that Ganeth-Klae feared it would be utilized for military purposes.

"I took him for a dreamer and a fool. Actually he was neither. How was I to know that his keen penetrating brain had seen through my motive to get control of all

commercial marketing of *Indurate*. I had laid my plans carefully, and I had expected to reap a nice harvest. Klae must have been aware of my innermost thoughts, but Martian-like he said nothing."

Norris paused to wet his lips and lean against the desk. "I didn't kill Ganeth-Klae," he continued, "though I suppose in a court of law I would be judged responsible for his death. The manufacture of *Indurate* required some ticklish work. As you know, we produced our halves of the formula separately. Physical contact with my half over a long period of time would prove fatal, I knew, and I simply neglected to so inform Ganeth-Klae.

"But his ultimate death was a boomerang. With Klae gone, I could find no trace of his half of the formula. I was almost beside myself for a time. Then I thought of something. Klae had once said that the secret of his half of the formula lay in himself. A vague statement, to say the least. But I took the words at their face value and gambled that he meant them literally; that is, that his body itself contained the formula.

"I tried everything: X-ray, chemical analysis of the skin. I even removed the cranial cap and examined the brain microscopically. All without result. Meanwhile the police were beginning to direct their suspicions toward me in the matter of Klae's disappearance.

"You know the rest. It was necessary that I leave Earth at once and go beyond our system, beyond the jurisdiction of the planetary police. So I arranged this voyage with a sufficient complement of passengers to lessen the danger and hardship of a new life on a new world. I was still positive, however, that Klae's secret lay in his dead body. I took that body along, encased in the Martian preservative, solidifex.

"It was my idea that I could continue my examination once we were safe on a strange planet. But I had reckoned without Ganeth-Klae."

"What do you mean?" I said slowly.

"I said Klae was no fool. But I didn't know that with Martian stoicism he suspected the worst and took his own ironic means of combating it. He used the last lot of *Indurate* to make that booster, a device which he said would increase our take-off speed. He mounted it on the *Marie Galante*.

"Mason, that device was no booster. It was a time machine, so devised as to catapult the ship not into outer space, but into the space-time continuum. It was a mechanism designed to throw the *Marie Galante* forward into the future."

A cloud of fear began to well over me. "What do you mean?" I said again.

Navigator Norris paced around his desk. "*I mean that the* Marie Galante *had not once left Earth, has not in fact left the spot of its*

moorings but has merely gone forward in time. I mean that the nine "landings" we made were not stops on some other planets but halting stages of a journey into the future."

Had a bombshell burst over my head the effect could have been no greater. Cold perspiration began to ooze out on my forehead. In a flash I saw the significance of the entire situation. That was why Norris had been so insistent that we always return to the ship before dark. He didn't want us to see the night sky and the constellations there for fear we would guess the truth. That was why he had never permitted any of us in the bridge cuddy and why he had kept all ports and observation shields closed.

"But the names of the planets . . . Coulora, Stragella, and the others and their positions on the chart . . . ?" I objected.

Norris smiled grimly. "All words created out of my imagination. Like the rest of you, I knew nothing of the true action of the booster. It was only gradually that truth dawned on me. But by the time we had made our first "landing" I had guessed. That was why I demanded we always take organic surveyor readings. I knew we had traveled far into future time, far beyond the life period of man on Earth. But I wasn't sure how far we had gone, and I lived with the hope that Klae's booster might reverse itself and start carrying us backwards down the centuries."

For a long time I stood there in silence, a thousand mad speculations racing through my mind.

"How about that piece of *Indurate?*" I said at length. "It was chipped off an image in the ruins of a great building a mile or so from here."

"An image?" repeated Norris. A faint glow of interest slowly rose in his eyes. Then it died. "I don't know," he said. "It would seem to presuppose that the formula, both parts of it, was known by Klae and that he left it for posterity to discover."

All this time Mason had been standing there, eyes smouldering, lips an ugly line. Now abruptly he took a step forward.

"I've wanted to return this for a long time," he said.

He doubled back his arm and brought his fist smashing onto Norris' jaw. The Navigator's head snapped backward; he gave a low groan and slumped to the floor.

And that is where, by all logic, this tale should end. But, as you may have guessed, there is an anti-climax—what story-tellers call a happy conclusion.

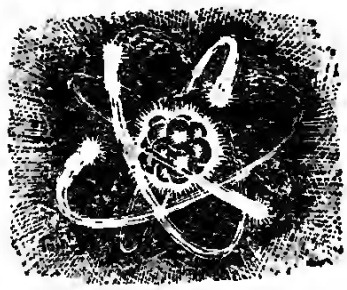
Mason, Brandt, and I worked, and worked alone, on the theory that the secret of the *Indurate* formula would be the answer to our return down the time trail. We removed the body of Ganeth-Klae from its solidifex envelope and treated it with every chemical process we knew. By sheer luck the fortieth trial worked. A paste of carbo-genethon mixed with the

crushed seeds of the Martian iron-flower was spread over Klae's chest and abdomen.

And there, in easily decipherable code, was not only the formula, but the working principles of the ship's booster—or rather, time-catapult. After that, it was a simple matter to reverse the principle and throw us backward in the time stream.

We are heading back as I write these lines. If they reach print and you read them, it will mean our escape was successful and that we returned to our proper slot in the epilogue of human events.

There remains, however, one matter to trouble me. Navigator Norris. I like the man. I like him tremendously, in spite of his cold-blooded confession, and past record. He must be punished, of course. But I, for one, would hate to see him given the death penalty. It is a serious problem.



Among the Contributors to Next Month's Issue will be

SAM MERWIN JR., *with* "Star-Flight"

CRAIG RICE, *with* "Pink Fluff"

TOM GODWIN, *with* "You Created Us"

BRYCE WALTON, *with* "The Nostopath"

FREDERIK POHL, *with* "Rafferty's Reasons"

EVELYN E. SMITH, *with* "Floyd and the Eumenides"

and many others

mission from space

by . . . Charles Eric Maine

The alien invasion fleet appeared to be approaching Earth with one remorseless purpose — the utter destruction of all human life.

THE ALIEN rocket fleet was first sighted at a distance of two hundred million miles from Earth by a mere baby of a telescope—a twelve-inch refractor located at the Broad Flats missile range in Nevada. There had been a night launching, and the ascent of a telemetering projectile was being observed to the limit of visibility against a backcloth of ebony and stardust. Something flashed in the darkness beyond the rocket—a group of faintly luminous streamers, out of focus, resembling a small shower of meteorites.

The observer, momentarily distracted from his routine task, automatically shifted the focal length of the telescope, and brought the fiery trails into clearly etched outline. They still resembled meteor tracks, and he was about to dismiss them as such when, quite unexpectedly, they disappeared behind the moon, which was in its first quarter and mostly dark.

It took about three seconds for the full significance of this extraordinary eclipse to sink in. Meteor

We all know what a terrifying weapon of destruction an atomic bomb can be, even when the means of delivering it is confined solely to jet planes and guided missiles with a cruising range of a few thousand miles. Extend that cruising range to fifty million miles and take the fictional liberty of making sure that the limiting factor of human fallibility has been eliminated, and you'll have all the ingredients of a real science fantasy shocker. This Charles Maine has done, in a startlingly dramatic frame of reference.

trails were a phenomenon of the upper atmosphere—a strictly local firework display that could not possibly be screened by the moon or any other solar body. The glow paths had been parallel and evenly spaced, suggestive of a number of luminous objects, or rocket-propelled craft, flying in formation. But such an idea was fantastic when astronautical development had not yet succeeded in sending rockets to an altitude of more than six hundred and forty miles. Unless . . . ?

A few miuntes later a teletype message arrived at the Department of Military Intelligence, Pentagon Building, Washington, D. C. It passed from the Traffic Office to the Signals Supervisor, who noted its priority and security classification, and routed it to the Duty Signals Officer in Room 400. He sent it to Astronautics, where the night staff, after a long telephone conversation with Air Intelligence, delivered it to the desk of General Cleary, Chief of S. D. S. S.

It was by that time nearly 2 a.m., but Cleary was working a special night shift until 6 a.m. He read the austere lettering on the teletype form, puckered his lips, and then wafted the slip of paper into a tray marked: *Pending*.

He locked his desk.

As an afterthought he lifted the phone and spoke to the Signals Supervisor. "Cleary speaking. About that message from K Site, Nevada. Get the telescope units at Denver and Seattle on teletype and find out if they've seen any unusual glow tracks."

"Priority, sir?" asked the Supervisor.

"Most immediate—and better make it top secret, too."

He replaced the phone, pulled the teletype out of the pending tray, and scanned it thoughtfully. Satisfied, he placed it in another tray marked: *For Action*.

By the next morning the required confirmations had come in, and more than that, reports had been received over diplomatic channels from observatories all over the Western Hemisphere. Cleary digested them in turn, making carefully inscribed notes on a memo pad.

When his relief arrived at 6 o'clock, he was in the middle of a comprehensive analysis of all the data he had received, and he insisted on remaining at his desk until 10 a.m. Then he said to his curious colleague:

"I don't like the looks of this, Kennedy. I want you to read through this abstract of intelligence I have compiled, and add any further data that may arrive during the day."

Kennedy, who had only a vague idea of what had been happening, nodded his head. "What does it all add up to?"

"Your guess is as good as mine. But it seems quite certain that some twenty or more rocket propelled objects are heading towards this corner of space at tremendous speed—

a speed that seems utterly fantastic to us at the present day."

"You mean they might be invading ships—men from Mars, and all that kind of stuff?" Kennedy grinned boyishly. "I'd like to see General Pyke's face when you tell him that!"

"I don't want to jump to conclusions," said Cleary, rubbing his tired eyes. "Right now I'm whacked. I can't think any more."

"You go and sleep it off, Cleary. It will probably turn out to be an optical illusion. Wait and see."

Cleary shrugged his shoulders. "The next few days will show," he said.

Ten days later the advancing glow-trails had covered half the distance between Earth and the point where they had first been sighted. This was an alarming fact, indicating a linear velocity of ten million miles per day, quite apart from transient accelerations due to gravitational fields and the fact that some kind of fuel was continually being burned, resulting in glow-tracks that were always present, though visible only at night.

Cleary had called in one of Uncle Sam's top astronautical scientists, Dr. Paul Reeves. The scientist was quite matter-of-fact in his interpretation of the phenomenon seen in the night sky. He explained the results of his careful analysis to Cleary, and all the time the General's face darkened and hardened.

"We know they cannot be natural objects," said Reeves, speaking slowly and choosing his words with care. "If they were they would follow a clearly-discernible orbit. Hence they must be propelled, and move by power.

"But no rocket with which we are familiar could carry so much fuel. The firing does not stop. That points to atomic propellants of great efficiency. So equipped, they are approaching Earth in a straight line. By not following an elliptical orbit, by moving as they do they save a great deal of time.

"But if they are so economical as to use a straight line it seems likely that the line has been directed at their destination from the start. They would hardly be likely to travel undeviatingly for two hundred million miles, or so and *then* turn. They would simply go straight from the beginning, as I've said."

Cleary said: "Like flying on a beam."

"Yes, exactly. Now we have checked the astral orientation of the flight of these objects. Their line of travel comes direct to Earth. It suggests that perhaps they know we are an inhabited world, and are coming in large numbers with hostile intent. If they were merely explorers would they not inspect other planets in our system too? Would exploring ships be so definite in their purpose?"

"You've got a point there, Doc," Cleary agreed. "That's been my impression all along. These things are *purposeful*. They seem to be coming to Earth as quickly as they can with

a definite object in view. Sure. Exploratory ships would arrive singly —or in twos and threes. But twenty-two rockets—and big ones at that—could carry a small army."

"And quite possibly weapons beyond our imagination," added Reeves.

"In other words, Doc, it's safe to assume that this is a hostile mission that should be met with force and determined armed resistance."

The scientist nodded. "That's right. But I fear our forces and guns and weapons may be as useless as so many toys."

"We'll see," Cleary murmured grimly. "When are these invaders scheduled to arrive?"

"In about ten days."

The General digested this fact in silence for a few seconds. Then he leaped to his feet and struck the desk with his fist.

"Then, by heaven, we haven't got any time to waste. We've got to act quickly."

During the ensuing week governments all over the world conferred and mobilized their forces in a supreme effort of communal defense. There was a widespread sense of hysteria and panic, accompanied by spasmodic outbreaks of rioting and religious fervour in Asia, where the exact significance of the approaching expedition was not clearly understood.

Cleary was the guiding hand behind the United States immense technical contribution to the defense of Earth. From coast to coast factories and plants, so far as they were capable, turned to the manufacture of weapons and munitions on a twenty-four hour basis.

There was little time left, and stock-piling was out of the question. But every single cartridge was vital. Two aircraft plants started making guided missiles carrying atomic war-heads that would ascend by rocket power and automatically home on to their targets.

There was tension, and grave concern and a consistently maintained alertness. But there was no sign of defeatism, and a cautious optimism prevailed.

On the day before the expected arrival—when the advancing fleet was already visible to the naked eye —Cleary went down to the Broad Flats rocket range in Nevada, accompanied by Dr. Reeves.

Nearly a hundred gantries had been hastily erected on the grey-yellow sand, and the atomic missiles were being moved into their launching positions. Reeves was delighted. To his scientific mind the scene was immensely satisfying. It was astronautics in action, on a scale that he had never before witnessed.

The General left him in the Headquarters blockhouse, and raced around the site in his jeep, carrying out last-minute checks, and issuing last-minute instructions.

The actual point on the Earth's surface where the invasion fleet would land was not known. The amount of deceleration could not be predicted, and it was likely that

the rockets would make use of air-braking, in which case they would probably circle Earth several times, screaming through the upper atmosphere in a decreasing elliptical orbit before settling down on the surface.

Nothing could be done until the enemy got down to a mere five hundred miles of altitude—when they would be within range of the atomic missiles. Provided they were over North America, and not on the other side of the world, Cleary intended to give them everything he had. It would be a superb firework display, high up beyond the clouds.

And if Asia or Australasia proved to be the target for the alien fleet—well, it was generally known that the British had a few tricks in reserve at the Woomera rocket range in Australia. Nobody knew what the Russians would do, but there was reason to believe that atomic-headed missiles would rise from the vast plains of Siberia too. The whole world was temporarily united in a single effort to destroy—or be destroyed.

It was a long, long night. The longest night in human history, Cleary thought. Broad Flats was a mosaic of twinkling lights, a gigantic spider's web of cables carrying current from diesel generators to thousands of naked lamps dangling between poles. The press and news services were strongly represented. The situation made any attempt at security censorship appear ridiculous. It was to be mankind's fight.

By dawn it was apparent that the anticipated deceleration was well under way. A quick radar trajectory check showed that speed was decreasing by more than thirty G, and that the rate of deceleration was continually going up. The invaders were slicing through the orbits of the inner planets with accurate precision—and it would only be a matter of two or three hours before they would be within range.

In the early morning, General Cleary kept the teletype lines from Broad Flats busy with priority messages to military centers throughout North America. The second line of defense, employing the more orthodox armed services, spearheaded by jet bombers and fighters, was in some ways even more impressive than the barrage of atomic rockets.

But the difference in mode of operation was to be in timing. The second line would go into action after the alien fleet had landed—and only then—if the rocket barrage proved to be unsuccessful.

Around nine o'clock Cleary installed himself in the Headquarters blockhouse, where a bank of hastily rigged metering panels brought essential information about the altitude and velocity of the projectiles.

At 09.17 the alien fleet had crossed the orbit of the moon, and were now clearly visible in the morning sunlight as a group of luminous dots close to zenith. The glow-trails had ceased during the night, but there was a suggestion of a diffused firing from the nose of

the rockets—suggestive of landing jets in action.

Two and a half hours later, with speed still dropping, the leading alien ship registered five thousand miles, and General Cleary pressed the switch that set the siren wailing ominously over the site. Gantries were pulled back as turbines started whining inside the forest of war rockets standing vertically on the desert. The sound grew to a crescendo—an insistent throb of tensed, straining power.

"At five hundred," said Cleary to the officers at the control desk. "When we see the whites of their eyes!"

But the fleet never reached five hundred miles. At four thousand one hundred an incredible thing happened.

The first warning symptom was a loud crackle heard over the radio communication channel.

Cleary went to the door of the blockhouse and looked up into the sky, shading his eyes from the sun. He saw a jagged blue line, flickering, it seemed, from the center of the group of approaching ships down to earth. And then another, and another—until the fleet seemed to be linked with the ground by a flashing, blinding, crackling network of thick cables wrought in blue light.

"They're attacking," he yelled, coming suddenly out of his petrified stance. "They're using rays."

Then, the next instant, two of the ships seemed to dissolve in a puff of searing incandescence that slowly descended through the spectrum of color—from blue to gold, then to orange and finally to red—like the long afterglow of an atomic bomb. Another ship exploded in the same way. Cleary stared in utter amazement.

One of the officers was shouting from the blockhouse, but the sound was meaningless to Cleary at that moment. The officer repeated his statement.

"They're turning around. They're in a seventy-five G curve."

Slowly Clearly absorbed the information, and saw that it was true. The remaining projectiles were changing course and no longer flying in precise formation. They had ceased acting as a group, and were behaving with individual urgency. But even as he watched, more ships disappeared in white heat, and all the time the crackling, shivering lines of force writhed between fleet and ground.

In three minutes flat the entire alien fleet was wiped out.

Cleary said: "Somebody has got a very good secret weapon—and it isn't Uncle Sam." He went back into the blockhouse. "Cancel the barrage," he ordered. "Cancel the alert to military stations. In fact—cancel everything." Then, as an afterthought: "Where's Reeves? He's the man I want to see right now."

"I SHOULD have foreseen it," said Reeves on the following day.

He was in Cleary's office at the

Pentagon in Washington, D. C. He held a file of papers in his hand, and occasionally riffled through them, as though seeking confirmation of some obscure point. But he kept his dark eyes fixed on Cleary's inquisitive features.

"The answer is so obvious—and yet I stayed awake all night trying to find it. Perhaps I'd better explain."

"Go ahead," Cleary murmured.

"You think of space as empty, do you not?"

Cleary shrugged his shoulders. "Well, there is a diffuse sprinkling of cosmic dust, I guess. And meteors—and radiation of different kinds."

"That is true. But for all practical purposes space is empty?"

"Okay—if you say so."

"I did not say so, General. There are—fields."

Cleary's mind was momentarily filled with a vision of great undulating plains of corn stretching between the planets.

"Are you crazy?" he asked politely.

"Electro-magnetic fields, and—electrostatic fields. Everywhere in space there exist potential gradients. The planets hold static charges with respect to each other."

"You mean—like clouds in a thunderstorm?"

"Exactly, General. The difference in static energy between one part of space and another may well be millions, perhaps billions of volts."

"You don't say," said Cleary, mildly surprised.

"So it follows that if the ships came from another solar system of vastly different static potential and approached a planet of our system—Earth, for instance—they would be carrying in their total metallic mass an immense electrostatic charge. And they would be approaching a planet of appreciably different charge potential."

"I begin to understand," said Cleary, his brow puckered and his eyes very distant.

"When the critical distance had been reached the result was a violent discharge of energy, as we all saw."

Cleary exclaimed, "Interplanetary lightning!"

Reeves nodded. "Where it struck the ships, the metal became instantly fused. It became white hot, and something inside the ships—fuel, or possibly weapons—ignited and exploded."

"It looked like a procession of atom bombs going up," said Cleary. "I never saw such a beautiful sight in my life."

"And there you have it," Reeves concluded. "Our planet's secret weapon against all invaders—the secret weapon of nature itself. *Static!*"

Cleary smiled, and got up from his desk. "Come with me, Doc," he said, with eloquent restraint. "I'm going to buy you a drink."

Reeves nodded appreciatively. "Yes, I would welcome one."

houlihan's equation

by . . . Walt Sheldon

The tiny spaceship had been built for a journey to a star. But its small, mischievous pilots had a rendezvous with destiny—on Earth.

I MUST admit that at first I wasn't sure I was hearing those noises. It was in a park near the nuclear propulsion center—a cool, green spot, with the leaves all telling each other to hush, be quiet, and the soft breeze stirring them up again. I had known precisely such a secluded little green sanctuary just over the hill from Mr. Riordan's farm when I was a boy.

Now it was a place I came to when I had a problem to thrash out. That morning I had been trying to work out an equation to give the coefficient of discharge for the matter in combustion. You may call it gas, if you wish, for we treated it like gas at the center for convenience—as it came from the rocket tubes in our engine.

Without this coefficient to give us control, we would have lacked a workable equation when we set about putting the first moon rocket around those extraordinary engines of ours, which were still in the undeveloped blueprint stage.

I see I shall have to explain this, although I had hoped to get right along with my story. When you

Every writer must seek his own Flowery Kingdom in imagination's wide demesne, and if that search can begin and end on Earth his problem has been greatly simplified. In post-war Japan Walt Sheldon has found not only serenity, but complete freedom to write undisturbed about the things he treasures most. A one-time Air Force officer, he has turned to fantasy in his lighter moments, to bring us such brightly sparkling little gems as this.

start from scratch, matter discharged from any orifice has a velocity directly proportional to the square root of the pressure-head driving it. But when you actually put things together, contractions or expansions in the gas, surface roughness and other factors make the velocity a bit smaller.

At the terrible discharge speed of nuclear explosion—which is what the drive amounts to despite the fact that it is simply water in which nuclear salts have been previously dissolved—this small factor makes quite a difference. I had to figure everything into it—diameter of the nozzle, sharpness of the edge, the velocity of approach to the point of discharge, atomic weight and structure— Oh, there is so much of this that if you're not a nuclear engineer yourself it's certain to weary you.

Perhaps you had better take my word for it that without this equation—correctly stated, mind you—mankind would be well advised not to make a first trip to the moon. And all this talk of coefficients and equations sits strangely, you might say, upon the tongue of a man named Kevin Francis Houlihan. But I am, after all, a scientist. If I had not been a specialist in my field I would hardly have found myself engaged in vital research at the center.

Anyway, I heard these little noises in the park. They sounded like small working sounds, blending in eerily mysterious fashion with a chorus of small voices. I thought at first it might be children at play, but then at the time I was a bit absent-minded. I tiptoed to the edge of the trees, not wanting to deprive any small scalawags of their pleasure, and peered out between the branches. And what do you suppose I saw? Not children, but a group of little people, hard at work.

There was a leader, an older one with a crank face. He was beating the air with his arms and piping: "Over here, now! All right, bring those electrical connections over here—and see you're not slow as treacle about it!"

There were perhaps fifty of the little people. I was more than startled by it, too. I had not seen little people in—oh, close to thirty years. I had seen them first as a boy of eight, and then, very briefly again, on my tenth birthday. And I had become convinced they could *never* be seen here in America. I had never seen them so busy, either. They were building something in the middle of the glade. It was long and shiny and upright and a little over five feet in height.

"Come along now, people!" said this crotchety one, looking straight at me. "Stop starin' and get to work! You'll not be needin' to mind that man standin' there! You know he can't see nor hear us!"

Oh, it was good to hear the rich old tongue again. I smiled, and the foreman of the leprechauns—if that's what he was—saw me smile and became stiff and alert for a mo-

ment, as though suspecting that perhaps I actually could see him. Then he shrugged and turned away, clearly deeming such a thing impossible.

I said, "Just a minute, friend, and I'll beg your pardon. It so happens I *can* see you."

He whirled to face me again, staring open-mouthed. Then he said, "What? What's that, now?"

"I can see you," I said.

"Ohhh!" he said and put his palms to his cheekbones. "Saints be with us! He's a believer! Run everybody—run for your lives!"

And they all began running, in as many directions as there were little souls. They began to scurry behind the trees and bushes, and a sloping embankment nearby.

"No, wait!" I said. "Don't go away! I'll not be hurting you!"

They continued to scurry.

I knew what it was they feared. "I don't intend catching one of you!" I said. "Come back, you daft little creatures!"

But the glade was silent, and they had all disappeared. They thought I wanted their crock of gold, of course. I'd be entitled to it if I could catch one and keep him. Or so the legends affirmed, though I've wondered often about the truth of them. But I was after no gold. I only wanted to hear the music of an Irish tongue. I was lonely here in America, even if I had latched on to a fine job of work for almost shamefully generous pay. You see, in a place as full of science as the nuclear propulsion center there is not much time for the old things. I very much wanted to talk to the little people.

I walked over to the center of the glade where the curious shiny object was standing. It was as smooth as glass and shaped like a huge cigar. There were a pair of triangular fins down at the bottom, and stubby wings amidships. Of course it was a spaceship, or a miniature replica of one. I looked at it more closely. Everything seemed almost miraculously complete and workable.

I shook my head in wonder, then stepped back from the spaceship and looked about the glade. I knew they were all hiding nearby, watching me apprehensively. I lifted my head to them.

"Listen to me now, little people!" I called out. "My name's Houlihan of the Roscommon Houlihans. I am descended from King Niall himself—or so at least my father used to say! Come on out now, and pass the time o' day!"

Then I waited, but they didn't answer. The little people always had been shy. Yet without reaching a decision in so many words I knew suddenly that I *had* to talk to them. I'd come to the glen to work out a knotty problem, and I was up against a blank wall. Simply because I was so lonely that my mind had become clogged.

I knew that if I could just once hear the old tongue again, and talk about the old things I might be able to think the problem through to a satisfactory conclusion.

So I stepped back to the tiny spaceship, and this time I struck it a resounding blow with my fist. "Hear me now, little people! If you don't show yourselves and come out and talk to me, I'll wreck this spaceship from stem to stern!"

I heard only the leaves rustling softly.

"Do you understand? I'll give you until I count three to make an appearance! One!"

The glade remained deathly silent.

"Two!"

I thought I heard a stirring somewhere, as if a small, brittle twig had snapped in the underbrush.

"Three!"

And with that the little people suddenly appeared.

The leader—he seemed more wizened and bent than before—approached me slowly and warily as I stood there. The others all followed at a safe distance. I smiled to reassure them and then waved my arm in a friendly gesture of greeting.

"Good morning," I said.

"Good morning," the foreman said with some caution. "My name is Keech."

"And mine's Houlihan, as I've told you. Are you convinced now that I have no intention of doing you any injury?"

"Mr. Houlihan," said Keech, drawing a kind of peppered dignity up about himself, "in such matters I am never fully convinced. After living for many centuries I am all too acutely aware of the perversity of human nature."

"Yes," I said. "Well, as you will quickly see, all I want to do is talk." I nodded as I spoke, and sat down cross-legged upon the grass.

"Any Irishman wants to talk, Mr. Houlihan."

"And often that's *all* he wants," I said. "Sit down with me now, and stop staring as if I were a snake returned to the Island."

He shook his head and remained standing. "Have your say, Mr. Houlihan. And afterward we'll appreciate it if you'll go away and leave us to our work."

"Well, now, your work," I said, and glanced at the spaceship. "That's exactly what's got me curious."

The others had edged in a bit now and were standing in a circle, intently staring at me. I took out my pipe. "Why," I asked, "would a group of little people be building a spaceship here in America—out in this lonely place?"

Keech stared back without much expression, and said, "I've been wondering how you guessed it was a spaceship. I was surprised enough when you told me you could see us but not overwhelmingly so. I've run into believers before who could see the little people. It happens every so often, though not as frequently as it did a century ago. But knowing a spaceship at first glance! Well, I must confess that *does* astonish me."

"And why wouldn't I know a

spaceship when I see one?" I said. "It just so happens I'm a doctor of science."

"A doctor of science, now," said Keech.

"Invited by the American government to work on the first moon rocket here at the nuclear propulsion center. Since it's no secret I can advise you of it."

"A scientist, is it," said Keech. "Well, now, that's very interesting."

"I'll make no apologies for it," I said.

"Oh, there's no need for apology," said Keech. "Though in truth we prefer poets to scientists. But it has just now crossed my mind, Mr. Houlihan that you, being a scientist, might be of help to us."

"How?" I asked.

"Well, I might try starting at the beginning," he replied.

"You might," I said. "A man usually does."

Keech took out his own pipe—a clay dudeen—and looked hopeful. I gave him a pinch of tobacco from my pouch. "Well, now," he said, "first of all you're no doubt surprised to find us here in America."

"I am surprised from time to time to find myself here," I said. "But continue."

"We had to come here," said Keech, "to learn how to make a spaceship."

"A spaceship, now," I said, unconsciously adopting some of the old manner.

"Leprechauns are not really mechanically inclined," said Keech. "Their major passions are music and laughter and mischief, as anyone knows."

"Myself included," I agreed. "Then why do you need a spaceship?"

"Well, if I may use an old expression, we've had a feelin' lately that we're not long for this world. Or let me put it this way. We feel the world isn't long for itself."

I scratched my cheek. "How would a man unravel a statement such as that?"

"It's very simple. With all the super weapons you mortals have developed, there's the distinct possibility you might be blowin' us all up in the process of destroying yourselves."

"There *is* that possibility," I said.

"Well, then, as I say," said Keech, "the little people have decided to leave the planet in a spaceship. Which we're buildin' here and now. We've spied upon you and learned how to do it. Well—almost how to do it. We haven't learned yet how to control the power—"

"Hold on, now," I said. "Leaving the planet, you say. And where would you be going?"

"There's another committee working on that. 'Tis not our concern. I was inclined to suggest the constellation Orion, which sounds as though it has a good Irish name, but I was hooted down. Be that as it may, my own job was to go into your nuclear center, learn how to make the ship, and proceed with its

construction. Naturally, we didn't understand all of your high-flyin' science, but some of our people are pretty clever at gettin' up replicas of things."

"You mean you've been spying on us at the center all this time? Do you know, we often had the feeling we were being watched, but we thought it was by the Russians. There's one thing which puzzles me, though. If you've been constantly around us—and I'm still able to see the little people—why did I never see you before?"

"It may be we never crossed your path. It may be you can only see us when you're thinkin' of us, and of course truly believin' in us. I don't know—'tis a thing of the mind, and not important at the moment. What's important is for us to get our first ship to workin' properly and then we'll be on our way."

"You're determined to go."

"Truly we are, Mr. Houlihan. Now—to business. Just during these last few minutes a certain matter has crossed my mind. That's why I'm wastin' all this time with you, sir. You say you are a scientist."

"A nuclear engineer."

"Well, then, it may be that you can help us—now that you know we're here."

"Help you?"

"The power control, Mr. Houlihan. As I understand it, 'tis necessary to know at any instant exactly how much thrust is bein' delivered through the little holes in back. And on paper it looks simple enough—the square of somethin' or other. I've got the figures jotted in a book when I need 'em. But when you get to doin' it it doesn't come out exactly as it does on paper."

"You're referring to the necessity for a coefficient of discharge."

"Whatever it might be named," said Keech, shrugging. "'Tis the one thing we lack. I suppose eventually you people will be gettin' around to it. But meanwhile we need it right now, if we're to make our ship move."

"And you want me to help you with this?"

"That is exactly what crossed my mind."

I nodded and looked grave and kneaded my chin for a moment softly. "Well, now, Keech," I said finally, "why should I help you?"

"Ha!" said Keech, grinning, but not with humor, "the avarice of humans! I knew it! Well, Mr. Houlihan, I'll give you reason enough. The pot o' gold, Mr. Houlihan!"

"The one at the end of the rainbow?"

"It's not at the end of the rainbow. That's a grandmother's tale. Nor is it actually in an earthen crock. But there's gold, all right, enough to make you rich for the rest of your life. And I'll make you a proposition."

"Go ahead."

"We'll not be needin' gold where we're goin'. It's yours if you show us how to make our ship work."

"Well, now, that's quite an

offer," I said. Keech had the goodness to be quiet while I sat and thought for a while. My pipe had gone out and I lit it again. I finally said, "Let's have a look at your ship's drive and see what we can see."

"You accept the proposition then?"

"Let's have a look," I said, and that was all.

Well, we had a look, and then several looks, and before the morning was out we had half the spaceship apart, and were deep in argument about the whole project.

It was a most fascinating session. I had often wished for a true working model at the center, but no allowance had been inserted in the budget for it. Keech brought me paper and pencil and I talked with the aid of diagrams, as engineers are wont to do. Although the pencils were small and I had to hold them between thumb and forefinger, as you would a needle, I was able to make many sensible observations and even a few innovations.

I came back again the next day—and every day for the following two weeks. It rained several times, but Keech and his people made a canopy of boughs and leaves and I was comfortable enough. Every once in a while someone from the town or the center itself would pass by, and stop to watch me. But of course they wouldn't see the leprechauns or anything the leprechauns had made, not being believers.

I would halt work, pass the time of day, and then, in subtle fashion, send the intruder on his way. Keech and the little people just stood by and grinned all the while.

At the end of sixteen days I had the entire problem all but whipped. It is not difficult to understand why. The working model and the fact that the small people with their quick eyes and clever fingers could spot all sorts of minute shortcomings was a great help. And I was hearing the old tongue and talking of the old things every day, and truly that went far to take the clutter out of my mind. I was no longer so lonely that I couldn't think properly.

On the sixteenth day I covered a piece of paper with tiny mathematical symbols and handed it to Keech. "Here is your equation," I said. "It will enable you to know your thrust at any given moment, under any circumstances, in or out of gravity, and under all conditions of friction and combustion."

"Thank you, Mr. Houlihan," said Keech. All his people had gathered in a loose circle, as though attending a rite. They were all looking at me quietly.

"Mr. Houlihan," said Keech, "you will not be forgotten by the leprechauns. If we ever meet again, upon another world perchance, you'll find our friendship always eager and ready."

"Thank you," I said.

"And now, Mr. Houlihan," said Keech, "I'll see that a quantity of gold is delivered to your rooms to-

night, and so keep my part of the bargain."

"I'll not be needing the gold," I said.

Keech's eyebrows popped upward. "What's this now?"

"I'll not be needing it," I repeated. "I don't feel it would be right to take it for a service of this sort."

"Well," said Keech in surprise, and in some awe, too, "well, now, musha Lord help us! 'Tis the first time I ever heard such a speech from a mortal." He turned to his people. "We'll have three cheers now, do you hear, for Mr. Houlihan—friend of the little people as long as he shall live!"

And they cheered. And little tears crept into the corners of some of their turned-up eyes.

We shook hands, all of us, and I left.

I walked through the park, and back to the nuclear propulsion center. It was another cool, green morning with the leaves making only soft noises as the breezes came along. It smelled exactly like a wood I had known in Roscommon.

And I lit my pipe and smoked it slowly and chuckled to myself at how I had gotten the best of the little people. Surely it was not every mortal who could accomplish that. I had given them the wrong equation, of course. They would never get their spaceship to work now, and later, if they tried to spy out the right information I would take special measures to prevent it, for I had the advantage of being able to see them.

As for our own rocket ship, it should be well on its way by next St. Patrick's Day. For I had indeed determined the true coefficient of discharge, which I never could have done so quickly without those sessions in the glade with Keech and his working model.

It would go down in scientific literature now, I suppose, as Houlihan's Equation, and that was honor and glory enough for me. I could do without Keech's pot of gold, though it would have been pleasant to be truly rich for a change.

There was no sense in cheating him out of the gold to boot, for leprechauns are most clever in matters of this sort and he would have had it back soon enough—or else made it a burden in some way.

Indeed, I had done a piece of work greatly to my advantage, and also to the advantage of humankind, and when a man can do the first and include the second as a fortunate by-product it is a most happy accident.

For if I had shown the little people how to make a spaceship they would have left our world. And this world, as long as it lasts—what would it be in that event? I ask you now, wouldn't we be even *more* likely to blow ourselves to Kingdom Come without the little people here for us to believe in every now and then?

the doorway

by . . . Evelyn E. Smith

A man may wish he'd married his first love and not really mean it. But an insincere wish may turn ugly in dimensions unknown.

"It is my theory," Professor Falabella said, helping himself to a cookie, "that no one ever really makes a decision. What really happens is that whenever alternative courses of action are called for, the individuality splits up and continues on two or more divergent planes, very much like the parthenogenesis of a unicellular animal . . . Delicious cookies these, Mrs. Hughes."

"Thank you, Professor," Gloria simpered. "I made them myself."

"You must give us the recipe," said one of the ladies—and the others murmured agreement, glad to get their individualities on a plane they could understand.

"Since most decisions are hardly as momentous as the individual imagines," Professor Falabella continued, "and since the imagination of the average individual is very limited, many of these different planes—or, as they are colloquially known, space-time continuums—may exist in close, even tangential relationship."

Gloria rose unobtrusively and took the teapot to the kitchen for a

A discerning critic once pointed out that Edgar Allen Poe possessed not so much a distinctive style as a distinctive manner. *So startlingly original was his approach to the dark castles and haunted woodlands of his own somber creation that he transcended the literary by the sheer magic of his prose. Something of that same magic gleams in the darkly-tapestried little fantasy presented here, beneath Evelyn Smith's eerily enchanted wand.*

refill. Her husband stood by the sink moodily drinking whiskey out of the bottle so as to avoid having to wash a glass afterward.

"Bill, you're not being polite to our guests. Why don't you go out and listen to Professor Falabella?"

"I can hear him perfectly well from here," Bill muttered—and indeed the professor's mellifluous tones pervaded every nook and cranny of the thin-walled house. "Long-winded cultist! What is he a professor of, I'd like to know."

"Professor Falabella is *not* a cultist!" affirmed Gloria angrily. "He's a great philosopher."

Bill Hughes said something unprintable. "If I'd married Lucy Allison," he continued unkindly, "she'd never have filled the house with long-haired cultists on my so-called day of rest."

Gloria's soft chin trembled, and her blue eyes filled with tears. She was beginning to put on weight, he noticed. "I've been hearing nothing but Lucy Allison, Lucy Allison, Lucy Allison for the past year. Y-you said yourself she looked like a horse."

"Horses," he observed, "have sense."

He was being brutal, but he couldn't help it and didn't want to. Professor Falabella was only the most long-winded of a long series of mystics Gloria was forever dragging into the house. *The trouble with the half-educated,* he thought bitterly, *is that they seek culture in the most peculiar places.*

"I'll bet she would have let me have peace on Sunday," he said. "It just goes to show what happens when you marry a woman solely for her looks." He drained the bottle; then hurled it into the garbage pail with a resounding crash.

Gloria's shoulders shook as she filled the kettle. "I wish I'd decided to be an old maid," she sobbed.

A very unlikely possibility, he thought. Even now, shopworn as she was, Gloria could have a fairly wide range of suitors should something happen to him. She looked sexy, but how deceiving appearances could be!

Professor Falabella was still talking as Bill and Gloria emerged from the kitchen. "I believe that it is possible for an individual who exists on a limited plane of imagination to transpose from one plane to an adjacent one without difficulty . . . Great Heavens, what was that?"

Something had whisked past the archway leading into the foyer.

"Don't pay any attention," Gloria smiled nervously. "The house is haunted."

"My dear," one of the ladies offered, "I know of the most marvelous exterminator—"

"The house," Gloria assured her coldly, "really *is* haunted. We've been seeing things ever since we moved in."

And she really believed it, Bill thought. Believed that the house was haunted, that is. Of course he had seen things too—but he was

enlightened enough to know that ghosts don't exist, even if you do see them.

Professor Falabella cleared his throat. "As I was saying, it is possible to send the individual through another—well, dimension, as some popular writers would have it, to one of his other spatial existences on the same temporal plane. It is merely necessary for him to find the Door."

"Nonsense!" Bill interrupted. "Holy, unmitigated nonsense!"

Every head swivelled to look at him. Gloria restrained tears with an effort.

"Brute," someone muttered.

But ridicule apparently only stimulated the professor. He beamed. "You don't believe me. Your imagination cannot extend to the comprehension of the multifariousness of space."

"Nonsense," Bill said again, but less confidently.

"I believe that I have discovered the Doorway," Professor Falabella continued, "and the Way is Open. However, most people fear to penetrate the unknown, even though it is to enter another phase of their own existence. I do admit that the shock of spatial transference, no matter how slight, combined with the concrete awareness of a previous spatial relationship would be perhaps too much for the keenly sensitive individualism . . ."

Bill opened his mouth.

"I know what you're about to say, young man!"

"You don't have to be a mind reader to know that," Bill assured him. His consonants were already a little slurred and he knew Gloria was ashamed of him. It served her right. He'd been ashamed of her for years.

Professor Falabella smiled. His teeth were very sharp and white. "Very well, Mr. Hughes, since you are a skeptic, perhaps you will not object to being the subject of our experiment yourself?"

"What kind of an experiment?" Bill asked suspiciously.

"Merely to go through the Door. Any door can become the Doorway, if it is transposed into the proper spatial dimension. That door, for instance." Professor Falabella waved his hand toward the doorway of what Gloria liked to call "Bill's study."

"You mean you just want me to open the door and go into that room?" Bill asked incredulously. "That's all?"

"That is all. Of course, you go with the awareness that it is the threshold of another plane and that you step voluntarily from this existence to an adjacent one."

"Sure," Bill said. He had just remembered there was a nearly full bottle of Calvert in the bottom drawer of the desk. "Sure. Anything to oblige."

"Very well. Go to the door, and keep remembering that of your own free will you are passing from this plane to the next."

"Look out, everybody!" Bill

called raucously, as he pulled open the door. "I'm coming in on the next plane!"

No one laughed.

He stepped over the threshold, shutting the door firmly behind him. A wonderful excuse to get away from those blasted women. He'd climb out of the window as soon as he'd collected the whiskey and give them a nervous moment thinking he'd really passed into another existence. It would serve Gloria right.

For a moment, as he crossed, he had a queer sensation. Maybe there was something in what Professor Falabella said. But no, there he was in the study. All that mumbo jumbo was getting him down, that was all. He was a nervous man—only nobody appreciated the fact.

Taking a cigarette out of the pack in his pocket, he reached for the lighter on his desk. It wasn't there. Time and time again he'd told Gloria not to touch his things, and always she'd disobeyed him. Company was coming and she must tidy up. Cooking and cleaning—that was all she was good for. But this was carrying tidiness too far; she'd even removed the ashtrays.

And where did that glass block paperweight come from? He'd had a penguin in a snowstorm and he'd been happy with it. This was too much. He'd tell Gloria off. Stealing a man's penguin!

He opened the door into the living room and bumped into Lucy Allison. "Don't you think you've been in there long enough, Bill?" she asked acridly. "I'm sure your guests would appreciate catching a glimpse of you."

"Why, hello, Lucy," he said, surprised. "I didn't know Gloria had invited you—"

"Gloria, Gloria, Gloria!" Lucy cut across his sentence. "You've been talking about nothing but that dumb little blonde for months." Because of the people in the room beyond, her voice was pitched low, but her pale eyes glittered unpleasantly behind her spectacles. "I wish you had married her. You'd have made a fine pair."

Gently, caressingly, the short hairs on the back of Bill's neck rose.

"Come back in here," Lucy said, hauling him back into the living room where a number of people who had been enjoying the domestic fracas suddenly broke into loud and animated chatter. "Dr. Hildebrand was telling us all about nuclear fission."

"Can't find an ashtray," Bill muttered, seizing on something tangible. "Can't find an ashtray in the whole darn place."

"We've been over this millions of times, Bill. You know—" she smiled at the guests, a smile that carefully excluded Bill. "—I'm allergic to smoke, but I never can get my husband to remember he isn't to smoke inside the house."

"Now take the neutron, for example," Dr. Hildebrand said through a mouthful of pate. "What

is the neutron? It is only . . . What was that?"

The wraith of Gloria crossed the foyer and disappeared. Bill took a step forward; then stood still.

Lucy smiled self-consciously. "That's nothing at all. The house is merely haunted."

Everyone laughed.

"Forgot something," Bill muttered, and dashed back into the study. He yanked open the bottom drawer of the desk. Sure enough, there was a bottle of Schenley, nearly a third full. "There are some advantages," he thought as he tilted it to his lips, "in having a limited imagination."

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the undiscovered country

by . . . Algis Budrys

It was a terrifying gamble with destiny. Could human cowards save the Nilkans and their far-flung stellar empire from flaming ruin?

ALL OVER the field, throwing out their complex shadows, the ships were coming in under Nilka's double sun. One by one they touched the ground, rocked a little, swayed on their landing jacks, and stood slim and graceful—all except the crippled ones.

Revis, standing in the opened airlock of his own barely-settled ship, saw the marks of battle still open and gaping on some of them. But they were all coming in with him, even the most hopeless cripples, because no one wanted to be left behind today.

It was foolish, but he couldn't blame them. His own ship had come in askew, her plates out of alignment, buttressed by hastily-mounted pressor beams that had held her steady until she could touch Nilka's soil and make that one last landing.

He stepped out of his airlock and climbed down the ladder to where Thal was waiting. The aging man's head was turned up toward him, and his voice was firm as he said in greeting: "Well, Revis."

"How are you, Thal?"

In science fantasy, as in every other department of imaginative fiction, the most striking and unusual stories have a way of illuminating some hidden recess of human nature with the searching light of a poignant perceptiveness. Algis Budrys, a many-times anthologized author, has seldom written a more dramatic story than this, with its vivid evocation of an intergalactic civilization in conflict with our own, and one man's exciting revaluation of human cowardice as the opposite of despicable.

"The same. But, how are *you*. How do you feel, now that it's over?"

Revis knew Thal better than he knew any other man alive, and he understood him. Thal was being neither triumphant or solicitous. He was asking his question Nilkan to Nilkan, friend to friend: now that the job's over, at last, how do you feel?

"Glad," Revis answered, but there was more to it than that. Thal was Nilkan born. A Nilkan born would have no difficulty with his feelings today. The threat of the alien invasion and the fear of the humans—was over.

Revis was a Nilkan, too. He was a Nilkan in everything that made a Nilkan—in appearance, in training, in mannerism, in love of nation and pride in race. But not too long ago, his name had been Reeves, and he had been an Earth-born human.

It was not the insignificant residue of human in him that was confused today. It was Revis, the Nilkan, who could not help the unrest and irresolution that nagged him.

Thal was the general—the planner. Thal was the man who had ferreted out the workings of the humans' Agency, cracked open the secret of Humanity's unbroken successes, and planned their defeat.

Revis was the man who had carried out that plan, and the ships and men now settling down on the field were the ships and men he had led in defeating the humans.

But, had he brought Thal and Nilka their victory? Yes, in a way. No, in a way.

Revis walked across the field at Thal's side, silently.

"There's going to be a palace reception for you and your officers tomorrow," Thal told him.

He nodded. His surviving officers were two hundred out of five. The rest were scattered out in space, their commands strewn out among the night in the ripped, exploded hulks that shone dull and frosty by the light of marker-beacons.

Corbett, Davis, McGill, Rittner —men he had known or heard of, all of them, before he and they had become Nilkans. Deiro, Rysen, Darfonten, Kuk—men he had first met here on Nilka, but all of them human first, and all bound together in their common failing.

Those, and scores of others he had never had time to know really well, had failed again and died because of their failure. But the rest of them had not failed. The onrush of the humans had been stopped. The dragon's teeth were pulled. Tomorrow there would be a palace reception.

He climbed into Thal's car and slumped into the cushions, his body missing the constraint of acceleration straps for one foolish moment.

"I'm driving you straight home," Thal told him. "I assume there's nothing else that can't wait, with Rema and the kids expecting you?"

Yes, even a Nilkan wife and children for the Nilkan warrior.

Nilkans born, all three of them. Why not?

"I've missed them," Revis acknowledged. And he had. He had prayed intensely, before he'd known whether he would succeed or fail, that he might live to come back to them. He had prayed, with a desperate unselfishness, that they might still have a man to look after them and provide for them. And when he'd succeeded, his first relief had been at the knowledge that they were safe, and would be waiting.

"Tired, Rev?" Thal asked.

He nodded silently.

"Reaction, I'd say," was Thal's comment. "You were keyed-up much longer than a man should be expected to be."

All my life, Revis thought.

II

All his life. He had been an officer-candidate on one of Vega's planets, the son of one of the oldest human lines on that planet. He had been brought up, from his earliest days, to be proud of his family and jealous of its reputation. He was the son of an officer, the grandson of a governor.

He knew, from his earliest walks and talks with his father, that he was one of Humanity's best. He was confident even then he would be an officer in Humanity's armies, and that the special qualities of intelligence, education, and tradition to which he had been born would obligate him to live up to them.

He could not disgrace that inheritance. He could not shirk the duties which were his by birth. Whether he instinctively felt the near-sacred flame burning within himself was unimportant. With the perfect empathy that was his from birth, he could feel it burning bright and clear in his father.

The knowledge of his obligation was his bulwark. The realization that he could not disgrace himself with weakness had made him strong.

Except that . . . He hesitated, then completed the thought. Except that he willfully refused to meet the standards set him.

What other explanation could there be for his inability always to be best at everything? To be better than most in most things was not enough. To be better than all in a few things was also not enough. It was insufficient redress for his miserable showing at another few.

He had to improve. He had to be better. So, he was an officer-candidate, working out a tactical problem in a training room where the blinking lights that represented ships danced hypnotic patterns on the walls.

He sat tensely over the control board, waiting for the signal to begin. He had to handle this one. He had to do it right. If he failed, it would be a mark against him. It did not matter that these problems were being constantly failed by the other candidates, that he had still three years of schooling to complete be-

fore he could be expected to take this kind of test in his stride. He had studied ahead in his books, and his own exceptional integrity demanded that he make a good showing now.

Begin.

He swept his eyes over the emerging problem, and was momentarily shocked by its simplicity. It was a classical planetary landing problem, which had a classical answer. His father had given it to him a little before his tenth birthday.

He almost punched out the solution before he caught himself. Anyone could give the classical answer. He must do better. His eyes leaped over the problem again, concentrating on its individual features. He ticked off the weak points. In less than fifteen minutes he had his better answer.

Wait. Any talented cadet could arrive at that one, particularly with the advantages he'd had. There might be a third alternative—some brilliant and original simplicity that stemmed from his native intelligence, rather than from his education.

There, now. Perhaps if three ships went in there and confused the enem—

You have failed.

He stared at the red light flashing on the panel. His time limit had expired. He tried to explain his solution to his instructor, but the man had simply dismissed it.

"Whatever it was, Cadet, you'd have been killed before you applied it. That wouldn't be much loss, but your command would have gone with you. An officer paralyzed with fear, no matter how brilliant his hindsight is, is worse than any merely competent clod who at least has the resolution to *do* something."

"With your permission, Sir, it seems to me that 'fear' fails to describe the symptom," Reeves had answered stiffly.

The examining officer snorted. "Indecision in the classroom means cowardice on the battlefield, Cadet. Fifteen demerits."

After that, why bother to continue? What good was there in further effort if he was fearful and indecisive? It was better not to try at all than to try and show his incompetence. He never went back at the end of his first year.

Thal stopped the car in front of the house. Revis opened his door.

"I'll see you tomorrow, Rev," Thal said. "I don't want to go in with you now. A man's family ought to be alone with him when he comes home."

Caught up in his complex feelings, Revis only nodded. He murmured some kind of thanks for Thal's being there to meet him and closed the car door. He walked up the path to his home, noticing how the lawn had been kept up, and that Rema had planted a garden.

This was his. In all the universe, this half-acre was his own cherished heritage. It was all he needed and all he wanted. It was on the world

he liked best. It was his home. His, and Rema's, and the kids'.

He lay in the dark that night, feeling his wife's warmth beside him, and knew that nothing in the world was worth trading for this.

Thal could never fully understand, even though Thal knew what his first marriage had been like.

After he left the academy on Vega's planet, he had plunged into racing. Looking back on it, he could see the process—the pressure of a snub here and there, the jab of his family's attitude. At the time, it had been a quick, unthinking process. But looking back on, he could see every step of the inevitable rush to prove himself. Not that it mattered now.

He punished himself and his inborn reflexes in the deadly treadmill of the sports' circuit. He loved racing, because he could pursue that road to glory without analyzing himself or his actions. He could lock himself in complete communion with the hurtling shell and motors of a light ship, just as he could share the emotions of the other pilots.

And when the course markers loomed ahead, he skipped between them as nimbly as though he were dancing, his face set in the half-dreaming smile that never faded or broadened. Week after week, from one racing season to the next, he poured his energy almost like fuel into the motors.

His father's money went into the initial equipment, and he kept it up with various advertising tie-ins. He was the best, and his name became famous. From the very first, he'd had the advantage of the most expensive equipment, and he won his races with unvarying regularity.

Then he was beaten once. He won just three times more, each time with more and more difficulty, and after that he never won again.

He'd met the girl while he was still winning. She was just another girl—prettier than most and a bit more intelligent perhaps—but still just another girl off the circuit. He'd gotten a shade more deeply involved with her than with any of the others, but it had really been no more than a mad infatuation.

When he began coming in a consistent second, he knew that he was through. He understood himself fairly well by then. He knew what had happened to him psychologically when he'd stopped being the front runner. In a flurry, he'd married the girl, desperately determined to safeguard his happiness.

At the end of their honeymoon—he hadn't yet dared tell her he was quitting—she had held him and kissed him. "I know this sounds terrible," she'd said, "but, in a way, I'm glad our honeymoon's over. Now you can win some more races for me."

He'd gone back. He'd gone back and wrecked his ship on the first leg of the first race. But everybody had seen him jump clear before he hit the turn, and had watched in horror while the ship, running wild,

had crashed two others and killed their pilots.

His wife was a girl off the circuit. As much as any of the racers, she knew what he'd become, and it was there in her eyes, as well as in the eyes of his closest friends. The newspapers picked it up, and then his father tried to quiet things down by bribing the families of the dead racers.

His wife had never touched him or kissed him again, and, after a decent interval—because she was educated to decency, just as he was—there was a divorce. Even so, that hadn't been ignored by the papers, either.

III

Rema turned over in her sleep, and he felt an almost tearful warmth as, in her slumber, she pressed her lips to his cheek and softly curled the tip of her silken tail around his wrist.

In the morning, Thal drove by for breakfast before he and Revis went to the reception.

Revis had not shaken off his mood, because it was more than just a mood. It was something not quite at the surface of his thinking, but very, very close to it, and he knew that until it broke through and made itself known, its nearness would continue to irritate him.

He touched hands with Thal and brought him into the dining patio, where the morning light was sparkling even though the air was not yet warm.

The boy-child clambered on Thal's lap, tugging at his whiskers, and the youngest tumbled over his feet as she tried to catch his temptingly dangled tail.

On a human planet, Revis thought, we would be calling him Uncle Thal. Uncle Thal—aging, bachelor Thal, his fur prematurely flecked with white, his eyes tired, and his body and his life bearing the marks of the long, long battle from which he had barely begun to relax!

How many years had passed since the Nilkans had first taken up arms? Eighty, by Nilkan count, eighty almost to the day since the young officer in the Nilkan Armed Services had come across the track of the human Agency which dealt in professional heroes.

Nilka had been the last major race in the galaxy to feel the pressure of the humans. Centuries of war had made her what she was, almost against her will. A bloody process of elimination had erupted spontaneously all over the galaxy, and—at the weary end of its aching centuries—only Nilka and the Human Federation remained.

Both had held aloof; both had fought only defensively, taking care to keep the area of conflict outside their borders. Now both were heir to what was left of the galaxy's great empires, and it was time for them to fight each other.

Like air rushing into a vacuum, the two civilizations expanded and met. And if neither had done the

heaviest fighting in the almost endless wars just past, each was nevertheless tempered and hardened, and equally ready. With full confidence in herself and her generals, Nilka prepared herself to meet Humanity. And then—under the most tragic of circumstances—the generals began to die or grow suddenly old.

Of all the junior officers who watched nervously while the top-level men were cut down, only Thal had paid analytical attention to the rumors that the Fates were always on the human side. And only Thal suspected that the Fates might be far more physical than they were mythical.

Surgically disguised as a human being, and indoctrinated with everything Nilkan libraries could supply on humans and human habits, Thal went into the Human Federation and began to search. He found nothing, at first. He learned a great deal about humans, and heard about their most famous, and infamous, men. But he learned very little about their mysterious luck, for they themselves had only a few rumors and misty legends.

Then he came across a dipsomaniac reporter who knew of an Agency that supplied military leaders to such alien cultures as needed them.

Thal came back to Nilka, and spent a long time in thought. Bit by bit, by poring over histories and battle diaries, and applying his own knowledge of strategy and tactics to the interpretation of records left by vanished empires, he reconstructed the Agency's past rough history.

He noted that the Galaxy had been reasonably peaceful before the rise of Humanity as a technological race. He observed how often the great, contending military leaders of various cultures had been men without pasts or predecessors, arbitrarily emergent heroes who appeared overnight. He tracked the course of war across the stars. Race A, adjacent to the human solar system, fought Race B, a little farther on, and when B emerged the winner, Race C, still farther, suddenly attacked.

One by one, the great races had cut each other's throats, and the humans had casually moved into their unresisting territories.

An Agency. An Agency which dealt in heroes, and which played once race off against the other, leaving both too weak to oppose the human advance. But how did the Agency create a demand for its product? And what was happening to Nilka's native leaders?

Thal was confident that he knew the answer. The Agency simply assassinated anyone in its way, either by killing them or lobotomizing them into senility. Hastily, he had made himself inconspicuous, knowing that if the Agency's assassins found him, Nilka was as good as beaten.

Revis, plucking at the rind of a breakfast fruit with absent finger-

tips, tried to imagine the despair that must have clutched Thal then. He was unsuccessful. No one could feel what Thal must have felt, knowing he could not communicate what he knew. If he told anyone in a position to act on his information—if, say, he told the emperor—then the emperor would die or be drugged into childishness the moment he tried to do anything. And once he had come out in the open, Thal's own days would be numbered.

It was months before Thal solved his problem, for it was threefold. He had to find some means of convincing his superiors, he had to make his arguments prevail without endangering them or himself, and, finally, he had to evolve a plan for defeating the Agency.

He exceeded his junior officer's authority countless times, by bluffing, lying, and stealing to get what he couldn't demand. But in the end he knew what would offer proof, what would have to be done, and what would defeat a hireling human hero.

He went back to the Human Federation and kidnapped a human coward.

Me, Revis thought. He kidnapped me, and I remember how horrified I was at this black-furred monster that yowled at me when I woke up. I remember the shock of understanding those yowls, looking down, and discovering that I had become a black-furred monster too.

Revis stared at Thal and shook his head in slow wonderment. Thal, his best friend.

Time changes a man's viewpoint . . . time, circumstance, and the sudden relief and hope at learning that he is outside Humanity's limits—that he is out of his trap, and that his brand had been left behind. Except for his brain, Revis didn't have the same body any more—perhaps he wasn't even a coward any more.

He saw that he'd automatically finished breakfast, and shook his head again, this time in amazement. He wasn't used to these analytical reveries any more. Not since he'd left his frail humanity behind.

But, of course, he hadn't. It would have been impossible in one miraculous stroke, even though Thal's surgical machines had rebuilt him, and the educator machines had re-taught him. The essential man was too deeply buried beneath education and race. He might be re-trained, but, inside, he would remain only what he had been born to be. Basically, he was still a coward

Thal was grinning at him. "Are you thinking of all those pretty girls who will be clustering around the reception center, ooh-ing and ah-ing over you?"

Revis cocked an eyebrow. "What else?"

"Don't you dare forget I'm going there, too," Rema reminded him in mock reproach.

Revis looked at her admiringly, at her midnight fur glistening in the sun. "What pretty girls did you think I was talking about?" he asked. He suddenly realized she had never completely understood him and he was back in his downcast mood again.

He cuffed the kids affectionately as he and Thal went out to the car. "Now, you cubs leave your mother in peace this morning, and mind what she says. She's got to get you all slicked up for the show this afternoon."

"Will they give you a decoration, Pop?"

He smiled at his son. "It's just possible, Junior."

Yes, it was distinctly possible. A decoration conferred on General Revis for meritorious service to Nilka in the war with the humans.

Time. Time . . . and circumstance.

IV

The drive to the palace was long and cool, and Thal drove slowly, as though he had discovered a way of drawing strength and courage from simply resting his eyes on the planet. Because of him, and almost no one else, Nilka was secure and sure of freedom for the first time in centuries, if you counted, as you properly should, from that historically remote age when the first Earthman had driven his first ship up among the stars with his hungry eyes covetously searching out the lands of other races.

Revis wondered what Nilka would look like through human eyes. But there was no way of telling. He had become a Nilkan far out in space, aboard Thal's ship, long before he had first seen his home world.

The first flurry of panic had been brief. It had taken him only seconds to realize he had become a Nilkan. He had looked back at the human Reeves and been glad, not as a Nilkan but simply as a man, that his human life could no longer trouble him.

Suddenly the memory of his panic at the thought of the Agency's assassins made him squirm in his seat, and Thal caught the motion out of the corner of his eye.

"Are you nervous, Rev?" he asked.

"Some," Reeves admitted.

Thal smiled wryly. "Me, too. Do you remember the last reception we attended?"

Reeves remembered it very clearly.

A new general had suddenly appeared on Nilka—a mysterious newcomer who was to lead Nilka to victory over the humans. Revis remembered clearly what an impressive-looking specimen he had been, and how unbounded had been his self-assurance.

It would always remain unclear whether the Agency was a straight commercial enterprise, unconnected with the general human military program, or whether it had made a deliberate attempt to betray

the Nilkan fleet. It made no actual difference, of course.

He and Thal had spent a sleepless night, trying to convince the emperor that the new general was a trojan horse. Revis smiled wanly as he pictured an obscure naval lieutenant, accompanied by a mysterious stranger, trying to gain a private, immediate hearing from the President of the Human Federation. But the Nilkans bred a more pliable brand of government official. Whether that had given them a more efficient government was debatable, but government on the political level was not Revis's department to worry about.

There had been a good deal on their side. Thal had displayed an uncanny knowledge of how the emperor might have had a mercenary soldier recommended to him, and the names of the ministers who had urged his appointment. A simple check at various banks had given Thal that list.

The very fact that Thal knew the general was a mercenary had been a big point in his favor. He had experienced more difficulty in persuading the emperor to believe the general was a disguised human. But in the end he had accomplished even that.

And, finally, when time had almost run out, they had convinced the emperor that they had stumbled on something worth investigating. And they had managed to do it at a crucial moment, leaving so little time for the Agency to discover precisely what was happening that there could be no effective countermove.

"Well . . ." the emperor had said slowly, "I think we can afford to let you try it. You know, I've sometimes wondered, myself, why so many of my advisors have been so favorably impressed with the reputation of a man they'd never even heard of before." He'd sighed and looked blankly down at his feet. "I'm not sure which hurts most—the ones who were lobotomized or the ones who were bribed."

On the day when the new general had been presented to the officer corps, Thal, wearing his provisional senior colonel's markings had stepped forward and introduced "Junior Colonel Revis."

Revis had advanced confidently, thrust out his hand, and said in perfect Terrestrial, "How do you do?"

The general's hand had not twitched in reply. But he'd looked at Revis nervously, unaware that hidden instruments were tracking his heartbeat and measuring his respiration.

The general had no help in that room. He was instantly paralyzed, and every Nilkan who had ever come into contact with him or urged his hiring had an unobtrusive Intelligence operative at his elbow. Others besides the general had been watched by the incorruptible instruments.

Revis smiled at Thal, now. "It

seems to me we didn't do too badly that time," he said.

Thal nodded. "No, we came out of that one all right. I guess we'll be able to stand today's pace without any trouble."

They reached the palace and turned the car over to an orderly. Then they walked into the gardens where the numerous officers were assembling. Some were chatting in small groups, re-hashing the war, and others were simply relaxing.

Revis stared around him with something very much like nostalgia. What he loved most about Nilka was the easiness of life, the urbanely cultivated attitude that provided food, drink, and a shady spot for refreshments before the unavoidable and faintly distasteful formalities had to be endured.

He knew that the other men in the garden were reacting in much the same way. And yet, except for Thal and a very few others, they were all human born. What was even more astonishing, all of them had been Nilkans for a much shorter time than he had.

He sat down at a table and brooded over all the men who'd brought Nilka something that resembled victory. It might have been better for everybody if Thal had simply taken what officers Nilka had left, reorganized the armed forces, and tried to defeat the humans with what he had.

But Thal had been right. Such a course would have left too great a chance of defeat. Aside from the regular human forces, there was the Agency to contend with. It had been rooted out of Nilka, and out of the Nilkan Empire. But it was still an active, highly-organized, hardly-wounded entity. Whatever its original motivations, it would join with the regular human military forces now, throwing the weight of its superbly trained and experienced strategists against Nilka. It had no choice but to try and wipe out Nilka to the last shred of evidence.

Revis wondered what the Agency's plans had been. Nilka was the last great enemy. Had the Agency planned to turn to the various human groups, setting off civil wars for its future profits?

There was no way of telling, of course.

V

For three years after the general's exposure, there had been something less than peace with the humans. But it could not actually be referred to as war.

The pressure was there. The frontier glowed fitfully with the buried coals of patrol actions and skirmishes. Thal, who in those three years had become Nilka's supreme military commander, was stalling for time, preferring to draw in rather than stand and fight with broken weapons.

In those three years, too, Revis had found a place for himself on Nilka. He had acquired a home, financial security and a wife. Thal

had made him a better-than-average Nilkan, and he fitted into this race far more easily than he could have fitted into human society on Earth. He had become a senior colonel, and soon he would become a general. But for three years he didn't know the other third of the careful plan Thal had worked out in complete secrecy.

Finally, Thal told him.

"Revis," he said, "even when it was at its peak, our fleet would have been defeated by the humans."

Revis looked at him in amazement.

"I mean it. We didn't think so at the time. But I saw it for myself while I was looking for the Agency."

"I don't follow you."

"Any Nilkan knows what any other Nilkan will do in a given situation. We've been here a long time. We've experienced a lot of things, and worked out standard answers for them. By trial and error, we've come to know exactly what to do about almost any eventuality. One answer for each problem, and one problem for each answer."

"It makes for a pretty serene life," Revis pointed out.

"Yes, it does," Thal agreed. "Now, consider humans. No human can predict another human's reactions with any certainty. Two humans observing the same thing —a man, a tree, a piece of music— will experience completely different emotions, and report widely divergent reactions.

He paused an instant, then went on: "Partly because they're such a young race, humans haven't become fixed in their habits. They have a philosophy of constant change. Last year's vehicle is unsatisfactory this year, even though the new model must be broken in and a new set of operating reflexes learned. Every year they discover what they think is the final answer to every problem.

"This may be immaturity, and we, with our piled-up wisdom, may enjoy smiling at it. But it is extremely deadly. It is crude, leapfrog, helter-skelter. It is raw progress."

Revis frowned. "So?"

"Consider the situation in a war. Our forces make a move, and set their defenses for the classical answer. But the humans do not *make* the classical answer. They don't know it. The answer they make will perhaps be foolish, ill-advised, or even suicidal. But it is not the answer we are expecting. Most of the time, the result will be a confused milling-about. Sometimes it will result in the massacre of part of the human forces.

"But sometimes it will be ourselves who are at a loss, and sometimes the humans' improvisation will be brilliant. Everything we know about war is useless, simply because our training is a hobble, rather than a weapon. We are immediately reduced to the hu-

mans' amateur level—and they are enthusiastic amateurs."

"You've got a point," Revis admitted slowly.

"I know I have." Thal leaned forward. "In all friendship, Rev, why, of all the humans I could have picked, did I take you?"

Revis shook his head. "I don't know."

"Because you are a coward," Thal said bluntly. "Not a weakling, but a coward. Now, consider cowardice.

"A coward may be a coward because he is conscious of how much he has, of how many solutions there are to a problem, and of what his adversary is feeling. I don't mean the perpetually frightened incompetent, understand. What I'm talking about here is the man who is unable to face isolated crucial events and is otherwise able to get along quite well.

"He is convinced, whether accurately or otherwise, that he possesses talents or qualities which are worth extraordinary protection. He has sufficient imagination to see, in every critical situation, the eventuality which will injure him, or the eventuality which will crush his adversary, whose viewpoint he can discern with considerable clarity. Or else he may see so many eventualities that he doesn't know which one to try for.

"He has placed a higher value upon himself and others than society is willing to grant him. It expects him, in certain situations, to act 'bravely'—that is to say, to act decisively and heedlessly, without considering anything but the immediate victory.

"The coward, however, can't adopt that course. He sees the possibilities in conciliation, in arbitration, or surrender at a cheap price—cheap being anything less than the loss of what he considers important. He chooses to run away, and live to fight another day, when the stakes will justify risking himself, another human being, or the degradation of some quality he considers important. The trouble is, of course, that with that much to be overbalanced, the other day rarely arrives."

Revis squirmed nervously in his chair, wondering why Thal had carefully avoided looking at him throughout his entire exposition.

"But if that 'other day' arrives somehow," Thal had continued, "then, the coward fights. If what faces him is sure death, for himself, for one of his talents, or for someone or something he values as highly as himself, then you have a fighter.

"Put a coward in a ditch, pin him down with gunfire, charge him with men he knows are out to kill him when they reach him. Sometimes, he'll lie there, afraid to risk the gunfire, and wait for the enemy to come and kill him. He prays for a miracle, perhaps. In any case, he doesn't break out of his shell. But, if the value he places on his life is not as high as that—if he doesn't

quite feel himself worthy of the intervention of a miracle—he'll ignore the almost certain death by gunfire, leap out of the ditch screaming with exploded nervous tension, and will attack the charging men. He'll be completely berserk, and yet not so insane as to forget how to throw grenades or use the butt and bayonet of his rifle.

"That's how some of the highest military honors have been won against all logic, and have completely, unpredictably, upset the mathematically certain strategy. They've been won by cowards who, for one instant, forgot that they were precious to themselves.

"Some do it early in life, and are never quite cowards afterward. Some do it late. I think it may depend on their valuation threshold. Some, of course, never do it. But they are in the minority.

"And that, Revis, is why you're going to help me recruit an army of terrestrial cowards, and why you're going to lead them in the field. We're fighting a war such as the Galaxy has never before seen. Its objective is to kill or be killed, not the simple chess-game maneuvering for territory or a sphere of influence. We're actually going to have battles in space.

"This is going to be something like a crusade, and it's going to be against humans. That's why I picked you, and why you'll lead Nilkan cowards who were first of all human cowards. Because only a human can defeat a human, and because only a coward will die for an ideal."

VI

Revis gestured in greeting to some personal friends he saw at another table, and hoped they wouldn't be offended by his not coming over or inviting them to his table. But, at the moment, he didn't want to talk to anyone. Not aloud.

Well, Thal, he thought, it worked. You used human cowards to defeat the Agency's human heroes and Humanity's regular fighters. We were more unpredictable than they, and we were the fiercer soldiers—those of us who lived.

And it was quite a recruiting service we ran. We found the cashiered officers and the draft-dodgers. We went into the psycho-neurotic wards of military hospitals. And we found our men and built up our new officer corps.

It was surprising how few we had to kidnap and make Nilkans before we dared to tell them what we were doing. A coward is a man with many viewpoints, and there were plenty of humans who saw the justice on the Nilkan side. We found a lot of Nilkans in human flesh.

Even the ones who had to be kidnapped weren't angry or shocked, because we took pride in our new Nilkan heritage, and all of us were glad to go. We had all been cowards, and we didn't want to be.

We broke the Agency, we broke

the Federation Navy, and—we broke ourselves.

He remembered staring at the unfolding pattern of enemy ships, not knowing precisely what to do —only knowing he had to do something. He had sent Rysen off on a bungled diversion that wiped him out down to the last ship, and he had blundered Deiro's and Darfonten's groups together, so that they had become hopelessly entangled and had been cut to ribbons. He had watched, paralyzed, while the Agency's sleek, dead-black, individual ships wove a baffling series of formations out of the Federation's ships, and he knew that if he didn't move immediately, the impenetrable trap would be sprung and the Nilkan fleet would be done.

But it was not until his own ship had been hit that he became overwhelmingly afraid. The breath tore in and out of his open throat, and his heart hammered convulsively. His palms were slick and streaming with perspiration on the controls, and blind panic chopped at his brain.

That was when he won the battle.

He could not stay where he was. He could not retreat, because the Federation ships were all around him. If he stayed, he died and the fleet died.

They had to get out through the Federation fleet. *Out* was smashing everything in front of you, turning, and decimating what was left so it couldn't catch and kill you. *Out* was a flaming scream in the silent black of space.

And now we're all home, Thal, those of us who came through it, and the war is over. Now we're your best—your battle-tried, your tempered veterans. Of all the Nilkans, we are your best and finest. You must know that.

We've come home to our wives and children. And now that the war is over, we'll go back to being what we were—merchants, politicians, engineers, artists— Whatever we were on human planets, we'll fit ourselves into Nilka's peacetime society, on Nilkan terms.

But, we're your leaders. We're almost the only leaders you've got left. Whatever we do, we'll lead, because there *is* an obligation, even though it's no particular mark of special worth.

Revis signaled to a waiter, and two drinks were set down on the table. He raised his glass to Thal's.

You made us men. Nilkan men, with Nilkan minds and Nilkan germ plasm. But we were born human, and that counts, for all that we love this new race of ours. If we could stop ourselves, we would. But we were born to improvise, to experiment, to worship instability. I can't help being what I am.

Whatever we do to Nilka's going to be for Nilka's good—or, anyway, that's what we'll try for. But we don't have the same viewpoint you do. When we look at some-

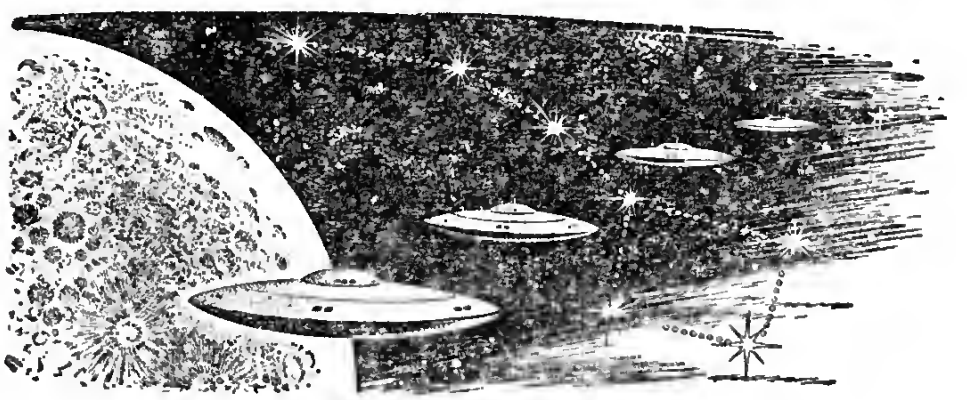
thing, we don't see it the way you do.

There isn't going to be a stable Nilkan society much longer. There will be a new kind of Nilka—a nation built out of the old Nilkan culture, but with a strong cross of human restlessness. Neither you nor I nor any contemporary Nilkan or human would recognize it. But its coming is certain.

Yes, it's a victory for Nilka. It's the hybrid stalk that towers above either of its parents, and the Human Federation will never rest easy again. But where has our beloved Nilka gone, Thal, and where is it going? I'm a little surprised at you for not considering that, and I wonder if you would have done what you did? What guarantee is there that the new Nilka will be a good land to live in?

They touched glasses. "To Nilka," Revis said.

"To Nilka," Thal answered, and Revis, looking up, saw that Thal was looking at him hopefully.



There's only one danger associated with the World Science Fiction Conventions which are held once a year in leading cities from Philadelphia to the Golden Gate. It's the danger of over-enjoyment, *of being so thrilled and delighted you'll pine the whole year through for another such gathering in quick, double stride. Well, this year's convention is to be held in Cleveland over the Labor Day weekend, with Isaac Asimov as the guest of honor and Anthony Boucher as the toastmaster. Need we say more? We suggest you make your attendance plans well in advance of the event, by getting in touch with the chairman, Noreen Falasca, P. O. Box 508, Edgewater Branch, Cleveland, O.*

rescue squad

by . . . Thomas J. O'Hara

Stark disaster to a brave lad in space may—to the mind that loves—be a tragedy pridefully concealed.

THE MAIL SHIP, MR4, spun crazily through space a million miles off her trajectory. Her black-painted hull resembled a long thermonuclear weapon, and below her and only a scant twenty million miles away burned the hungry, flaming maw of the Sun.

The atomic-powered refrigeration units of the MR4 were working full blast—and still her internal and external temperatures were slowly and inexorably rising. Her atomic engines had been long since silenced—beaten by the inexhaustible, fiery strength of the invincible opponent waiting patiently a narrowing twenty million miles "below."

Hal Burnett twisted painfully on the narrow space-bunk, his tormented body thrusting desperately against the restraining bands of the safety straps that lashed him in against the dangers of non-gravity.

He moaned, and twisted sideways, while his half-asleep mind struggled on an almost instinctive level against a dimly-remembered, utterly intolerable reality.

When Mr. O'Hara won the prize story contest recently conducted by THE FANTASY WRITERS' WORKSHOP *at the College of the City of New York, in conjunction with* FANTASTIC UNIVERSE, *it was the unanimous opinion of the judges that a second story by Mr. O'Hara,* RESCUE SQUAD, *deserved honorable mention. We think you'll agree with that decision when you've read this documentary-type science-fiction yarn, which so excitingly combines realistic characterization with the mystery, suspense and terror of the near future's exploration of space and a lone pilot's struggle to survive.*

It was a losing battle. He was suddenly wide awake, staring in horror at the vibrating bulkheads of the deserted little mail ship. For a moment his conscious barriers against reality were so completely down that he felt mortally terrified and overwhelmed by the vast emptiness about him. For a moment the mad idea swept into his mind that perhaps the universe was just another illusion, an echo of man's own inner loneliness.

Realizing his danger, Burnett quickly undid the restraining safety straps, sat up and propelled himself outwards from the edge of his bunk. The sudden surge of physical action swept the cobwebs from his mind.

He thought of his father—and there was bitterness in his heart and frustration, and a rebellious, smouldering anger. The old man would never know how close he had come to cracking up.

For a moment he wondered fearfully if his father's cold and precise appraisal of his character and courage had been correct. Suppose he *was* unable to stand the rigid strains and pressures of a real emergency. Suppose— He tightened his lips in defiant self-justification. What did they expect of a twenty-year-old kid anyway? He was, after all, the youngest and probably the greenest mail pilot in the entire Universal Run.

Suddenly the defensive barriers his mind had thrown up against the grievous flaw in his character which made him feel uncertain of himself when he should have felt strong and capable crumbled away completely. He could no longer pretend, no longer deceive himself. He hated his father because the elder Burnett had never known a moment of profound self-distrust in his entire life.

He remembered his father's favorite line of reasoning with a sudden, overwhelming resentment. "Fear can and must be controlled. If you have your objective clearly in mind a new experience, no matter how hazardous, will quickly become merely a routine obstacle to be surmounted, a yardstick by which a man can measure his own maturity and strength of purpose. You'll find peace of mind in doing your work ably and well and by ignoring all danger to yourself."

It was so easy to say, so hard to live up to. How, for instance, could a twenty-year-old kid on his *first* mail run hope to completely outwit fatigue, or even forget, for a single moment, that it *was* his first run. Fatigue had caused his undoing, but had he been completely fearless he might have found a way to save himself, might have managed somehow to prevent the small, navigational errors from piling up until they had carried him past the point of no return.

A constant re-checking of every one of his instruments might have saved him. But he had been too terrified to think straight, and too ashamed of his "first-run" inex-

perience to send out a short wave message requesting emergency instructions and advice. Now he was hopelessly off his course and it was too late. Too late!

He could almost feel the steadily-growing pull of his mindless enemy in the distant sky. Floating and kicking his way over to the Tele-screen, he quickly switched the instrument on. Rotating the control dials, he brought the blinding white image of the onrushing solar disk into perfect focus. Automatically he adjusted the two superimposed polaroid filters until the proper amount of light was transmitted to his viewing screen. They really built ships and filters these days, he reflected wryly. Now if they could only form a rescue squad just as easily—

Even through the viewing screen he could almost feel the hot blast of white light hit his face with the physical impact of a baseball bat. With what was almost a whimper of suppressed fear he rocked backward on his heels.

The Sun's ghastly prominences seemed to reach beckoning fingers towards him, as its flood of burning, radiant light seared through the incalculable cold of space, and its living corona of free electrons and energy particles appeared to swell and throb menacingly.

Fearfully he watched the flaming orb draw closer and closer, and as its pull grew more pronounced he wondered if it were not, in some nightmarishly fantastic fashion becoming malignantly aware of him. It resembled nothing so much as a great festering sore; an infection of the very warp-and-woof stuff of space.

He flipped off the power control on the Tele-screen and watched the image fade away with a depleted whine of dying energy. That incandescent inferno out there— Grimly he tried to recall the name of the man who had said that, philosophically, energy is not actually a real thing at all.

He knew better than to waste time trying the pilot controls again. They were hopelessly jammed by the great magnetic attraction of the Sun. They had been jammed for hours now. He forced his way back to his bunk, and securely lashed himself to it again. Sleep was his only hope now, his only real escape from the growing, screaming hysteria within him.

He flung an arm across his tired face. His thin features trembled as he remembered the continuous alterations in his trajectory that had brought him within range of the Sun's mighty pull. He remembered also every detail of the last and gravest of the series of miscalculations that had swept him from the established route of the regular Venus-Mercury mail run, and threatened him with a violent, flaming end.

Greatly off course, he had been approaching Mercury, a routine thirty-six million miles from the Sun. On this, the final leg of his

long journey, he had deviated just far enough from the extreme limits of safety to find himself and his ship gripped inexorably in the mighty magnetic fields of the Sun's passage . . .

He remembered a name— Josephine.

There would be no lover's meeting now on the green fields of Earth in the dusk of a summer evening. There would be no such meeting now. Not unless the prayers and dreams a boy and a girl had shared had followed him, plunging senselessly into the cold glacial heart of interstellar space.

His false bravado began to break and he began to weep quietly. He began to wish with all his heart that he had never left home.

The sudden crackling of the almost static-jammed ultra-wave radio snapped through to his mind. Quickly he began to free himself from the bunk.

"MR4, come in MR4."

An eternity seemed to pass as he floated across the room, deliberately disregarding the strategically-placed hand-grips on the walls, floor, and ceiling. It seemed aeons before he reached the narrow little control compartment, and got the ultra-wave radio into action, nearly wrecking it in his clumsy-fingered haste.

"MR4 to Earth. Over."

He waited a few moments and then repeated the message as no acknowledgment came through. Then he abruptly remembered the nearby presence of the Sun and it's interference with radio transmission and reception. He was white and shaken by the time his message was received and his report requested and given.

He gave the whole tragic picture in frantic short wave. The amount of atomic fuel left in the ship, the internal and external temperatures, the distance from the Sun, and the strength of the solar disk's magnetic field and his rate of drift toward it—along with a staggering list of other pertinent factors.

At last it was over and he stood by awaiting the decision from Earth headquarters.

It came at last.

"MR4." The growling voice was Donnelly's, the huge space-engineer in charge of the smaller mail-rocket units. "You're in a tough spot but we've got an expert here from the Government. He's worked on deals like this with me before and he's got an idea.

"Here's the substance of it. We're going to send out a space tug from Mercury to see if we can haul you in. It's a new, experimental tug and it's been kept under wraps until now. But it's been designed for jobs like this and we figure it can sure as hell do it.

"There's just one hitch, though, kid. It's a mighty powerful ship so there's going to be a terrific shock when it contacts you and the magnetic grapples set to work. In your medicine kit you'll find a small hypo in a red-sealed plastic box.

Take the shot that's in it immediately and we'll have the tug out there as soon as we can. It will probably take about twelve hours."

Donnelly's voice broke and he hesitated strangely for a moment. "You'll be out fast," he went on. "So you won't feel a thing when the shock wave hits you. There's less chance of injuries, this way."

"It's a lousy thing to do," cried Donnelly as he snapped off the set. "A rotten, heartless way of giving the lad false hopes. But then you don't give a damn about anybody's feelings but your own, do you, Doc?"

"Take it easy, Joe—"

"Shut up, Williams. I'm talking to this little Government time-server over here, not to you."

The psychiatrist shrugged wearily. "I don't care what you think. I've worked with you both on cases similar to this before, though I'll admit that none of them were quite as hopeless. In any case, I'll do it my way, or not at all."

"Maybe you will, maybe you will," said Donnelly. "But if I had to wait thirty days in that thing and somebody told me it was only a matter of hours—"

"I know what I'm doing even if you think that I don't. The Government has developed a set approach in matters like this. Fortunately, there aren't many of them. Perhaps if there were—"

"Let me take over, Doc," broke in Donnelly. "I'm a space-engineer and that makes me far better qualified to handle this than you are. Why the hell they ever put a psychiatrist on this job in the first place is something I'll never know, if I live to be a hundred and ten. It's a job for an engineer, not a brain washer."

"There's a lot of things you'll never know, Donnelly," the gaunt, thin little man sighed wearily. He sat down at the long mahogany table in the Radio Room. With a careless wave of one arm he swept a pile of papers and magazines to the floor.

"Try and get this through your head, Donnelly. There's not too much you can do by yourself for that boy up there. You just don't know how to cope with the psychological intangibles. That's why they have me here—so that we could work together as a team.

"Now the sooner you get on that radio and follow my instructions for the pilot the sooner we'll get this over with. Then maybe I can go home and spend a hundred years trying to forget about it. Until then please try and keep your personal opinions to yourself. Please."

Donnelly's face flushed a still deeper red. His fists clenched and, as a muscle started to twitch warningly in his cheek, he started to get up. He stopped for a moment—frozen in silence. Then he relaxed and pushed back his chair. With a heavy sigh, he maneuvered his huge bear of a body to its feet.

He rumbled something disgustedly in his throat and then spat casually on the floor. "Williams," he thundered. "Get the hell out of here and get us some coffee."

He waited a moment until the only witness had left the room and then, with grim determination, he turned to the little psychiatrist seated at the table.

"You, Doc," he said coldly and with deliberate malice, "are a dirty, unclean little—"

Williams, when he eased his slight body through the door a few minutes later, found a suspicious scene. The little doctor, his face flushed and rage-twisted, his effortless and almost contemptuous composure shaken for once, was on his feet. Speechless, he faced the grinning space-engineer who was waving a huge and warning finger in his face.

"Easy, Doc," Donnelly roared in a friendly voice. "I might take advantage of it if you keep on giving me a good excuse. Then where would all your psychiatry and your fine overlording manners get you?"

"Joe," yelled Williams in explosive sudden fright. "Leave him alone. You're liable to have the Government Police down on us."

"Sure, Williams. The police and the newspapers too. They'd just love to have the taxpayers find out what they're doing to those kids out in deep space. What would they call it, Doc? Just an interesting psychological experiment? Is that what it's meant to be, eh, Doc?"

He chuckled suddenly as the little doctor flinched under his virulent attack. "I really hit the spot that time, didn't I, Doc. So that's what the Government's so scared and hush-hush about. They're really scared to hell and back, aren't they? I wonder what's really going on behind all this?"

He leaned forward, suddenly roaring and ferocious. "Why are Williams and I followed everywhere we go when we leave here? To see who we talk to? Is that the way of it? Why do quite a few of the ships you and I and Williams have rescued in the past few years never show up again? Just where are they? I don't see them reported missing in the newspapers, either."

He leaned back in exhausted satisfaction at the look on the little doctor's face. "Yeah, Doc, the only way to get anything out of you is to blast it out, isn't it?"

Pale and frightened Williams hurried across the room to the table and, with shaky hands, took out three containers of coffee from the paper bag and passed them out.

Nobody bothered to thank him.

The hidden tension in the room had begun to mount steadily, so Donnelly helped it out a little.

"Is this the first time you've ever been on the defensive, Doc?" he asked.

Williams jumped in before the explosion. "When will the rocket

get to the kid's ship, Doctor?" he asked.

"In about thirty days," the little man answered, coldly and deliberately.

Williams blinked in surprise. "Good Lord," he said. "I thought it was supposed to be in twelve hours or so?"

"That's the whole point," snapped Donnelly. "That's what I'm so fighting mad about. Think of it yourself, Williams. Suppose you had a son or a brother up there, how would you feel about this whole infernal, lying business?

"I don't get it," he went on. "I just don't get the big central idea behind it. Don't all these tugs we send out ever get there? First they tell the kid he'll have his life saved in twelve hours or so. Then they get him to take a shot so his mind won't crack up while he's waiting.

"Now they know very well the shot won't last for thirty days. If it did he'd starve to death. So what have they accomplished? Nothing. As a matter of fact they've made things worse instead of better. What's going to happen to that poor kid when he wakes up in twelve hours and finds out he still has to wait for thirty more days? What's going to happen to him then, Doc? Don't you think that kid will really go off his rocker for sure?"

Donnelly and Williams both looked at the little psychiatrist. He sat again at his former place at the table, white and shaken. His face was once again buried in one hand.

"Come on, Doc," whispered Williams, quietly. "What's going on here, anyway?"

"That's enough," cried the doctor, suddenly. He sprang up and strode towards the door. "Leave me alone," he exclaimed, almost in tears. "By heaven, I've had enough of this. I've had all I can stand."

Donnelly moved to block the door and the psychiatrist came abruptly to a halt. "That ain't enough, Doc. You get out after you talk."

"For God's sake, Joe."

"Shut up, Williams, I'm warning you for the last time."

"Let me by. I warn you, Donnelly. Let me by."

Williams moved in, regaining a sudden spurt of assurance. "What about that kid up there, Doc? Nobody's letting him by, are they, Doc?"

A look of utter weariness swept across the doctor's face.

"All right," he said. "You may as well know the truth then. You won't like or understand it, but here it is anyway. You see, there isn't any tug up there, experimental or otherwise. There was only our need for a good excuse—in this present case—to get him to take the drug. You're a space-engineer and a good one, Donnelly. That's why you were chosen for this job. If anybody could help those kids, you could."

Donnelly's face tightened warningly and the doctor hurried on." You would have known about it if there had been any experimental models developed even if they had been secret. As a matter of fact, with your standing, you would probably have been working on them."

"Why all this, then, Doc? Why?"

"Because," the little doctor hesitated—and then shrugged. "I may as well tell you. It's not going to make any difference now, anyway. It was all done to put him out for several hours until—"

"Until what, Doc." Donnelly's tone was harsh and uncompromising.

"You must understand that I'm under orders. I'm doing what is done in all these cases. Though heaven help me, I wish I didn't have to—"

"Doc," Donnelly roared. "You have been contradicting yourself all along and I intend to find out why."

"There isn't much more to find out . . . Wait."

The doctor strode quickly over to the radio, and glanced at his wristwatch. His face haggard with strain, he turned to Williams. "Will you contact the MR4, please?"

He held up a silencing hand to Donnelly. "There's a reason behind all this. Just wait for a moment, please. Just wait and listen—"

It was a fumbling-fingered ten minutes later, after Donnelly had signed off, that Hal Burnett finally found the tiny red plastic box in the little emergency medical kit. Trembling he held it in his hand as he floated in free fall.

It was a little red key—a key to Earth, to life and to the chance to ram every cold, precise, contemptuous word down his father's over-analytical mouth.

He didn't really hate the old man but he knew that he feared him. He feared also that his father might be right about him after all. Who in his own mind, he thought bitterly, should know a son better than that son's own father.

A quick surge of elation swept over him as he swam quickly to the Tele-screen and switched it on. It wasn't a bit like saying good-bye to an old friend, he thought, as he gazed at the flaming prominences not so far below him. After a while he switched the instrument off and swam triumphantly back to his bunk.

There were some tri-dimensional color slides in the ditty bag hanging by his bunk. He took them out and looked at them. None of them were of his father.

The girl was there, though. She was a small, cute girl with a rainbow of laughter wreathed about her. She hadn't been really important before, but she sure was important now that he was going to live. His old man had foretold that, too.

After a little while he put the

slides back in the portable holder and broke open the plastic box. It contained a gleaming hypo filled with what looked like a small quantity of water. There was an odd peppermint-like odor about it.

There were no instructions. Just the needle and the little red box.

He wondered how many hours he would have to wait before help would come. But that didn't matter. He would be asleep, anyway.

The temperature had climbed. It was burning, roaring hot.

Gently he slid the needle into his arm and depressed the plunger . . .

The MR4 continued to spin even more lazily in space. Her sun-blackened hull, pitted by the glancing blows of by-passing meteor fragments, was slowly overheating. Her refrigeration units were gradually breaking down under their tremendous overload.

She was inching in ever-shortening circles always in the direction of the massive, molten globe not so far below . . .

Sometime later, Hal Burnett awakened slowly, as if from some distant and dimly-remembered dream. The haze of a deep and foggy sleep clung to the unfamiliar mass that was his mind.

A distant alarm bell had rung deep within the primitive, subcortical levels of his brain. It had rung—but not loudly nor insistently enough. It had failed to cut through the eddying fog that was rising slowly into his ebbing consciousness.

He did not remember undoing the straps with benumbed and aching fingers. He did not remember the befogged and stumbling "walk" into the Control Room. Dimly, as if viewing himself and the room from a distant world, he switched on the dying hum of the radio and tried futilely to transmit a message.

The faint crackle of the radio grew more distant. He slumped forward in the bucket seat, his head striking the controls in front of him—and, for him, the sounds of the muted radio died out completely.

The burning heat seared into the metal hull of the MR4. It's outer hull was almost at the boiling point. Inside, it was a burning, suffocating hell. Perhaps it was the heat that aroused Hal Burnett once again. Somehow he managed to stumble to the Tele-screen. With the last vestige of a waning strength he managed to switch it on and hold himself erect.

The stupendous white blast of the Sun struck across his staring eyes, but he did not flinch. Unconscious, his hands clutched at the control knobs as his sagging legs let him drift weightlessly toward the floor. He was like a drowning swimmer, out of control and helplessly floating under water.

He seemed to become aware for a moment as a last flicker of consciousness crossed his mind. He

mouthed something unintelligible —a last, forgotten word.

Anchored only by his grip on the control knobs, his weightless body floated aimlessly in the almost steaming cabin as the awful stillness re-echoed throughout the hollow vault of the ship.

Down below, with ever-growing closeness, the Sun waited patiently, like a bright and hovering vulture.

The MR4 swung and pivoted gently like a ship at sea straining at its anchor in the first, fresh breezes of a gathering storm. For a moment it seemed to hesitate like a coy maiden on the verge of some unknown threshold. Then, abruptly, she climaxed her voyage and plunged directly toward the waiting Sun some twenty million miles below, carrying with her only her dead cargo; her pilot—

The radio crackled noisily after Hal Burnett's last incoherent transmission. It crackled aimlessly for a few moments—and then was still.

"Something's wrong," said Williams, a thin thread of moisture shining down his face. "Something's gone wrong up there!"

"It sure has," said Donnelly, quietly. "And I know who I'm going to ask about it."

The little doctor said nothing. His face was an embittered parchment mask. "It's happened. God help me. It's happened. He's gone," he muttered, almost inaudibly.

Donnelly sighed heavily, a look almost of defeat sweeping momentarily across his features. "See here, Doc," he said exhaustedly. "Don't be so heartless about people. You've got a son of your own in space, so you ought to understand how other people feel. What kind of a father would do a thing like this to another man's son anyway?"

"Look, Donnelly," said the little man with bitter weariness. "Do me a favor will you? You fill out the reports tonight. Somehow or other I just don't feel up to it."

"Maybe it's your conscience," said Donnelly, sarcastically. "But I'll be damned if I'll do it for you. You don't like to do your own dirty work, do you, Doc? I thought you just loved to fill out Government reports."

"Donnelly, Donnelly," cried the doctor in sudden anguish. "Can't you understand yet. Even an undertaker's job is unpleasant but somebody's got to do it. Don't you see yet? *It has to be done!*"

With a muffled groan of disgust Donnelly sprang to the radio once again, pushing Williams roughly aside. Futilely, and in desperation he strained at the controls for a moment and then, with a roar of fury, he turned back to the doctor.

"Now see here, Doc—" he thundered, and then stopped in amazement.

The door to the dim and ill-lighted outer hallway of the lab was standing open. And at the far end, the outer door was quietly closing behind the disappearing

figure of the bent-shouldered little man.

Donnelly started to spring after him, and then abruptly stopped. His huge figure slumped in sudden despairing futility as he recognized the tragic hopelessness of the situation.

"Let him go," rasped Williams. "There's nothing we can do now anyway, Joe."

"Yeah, yeah. Let's write the report up ourselves. That's real important, you know. The Government needs it."

He sat down at the typewriter, his heavy features twisted in hopeless bitterness and anger. He started typing, and then stopped for a moment.

"What was this kid pilot's full name, Williams?"

Williams checked the Government order sheet. "Hell," he said. "Strangely, it's the same as the doctor's, Dr. Alfred Burnett. Only the kid's name is Harold Burnett."

Donnelly sat, suddenly transfixed, staring at his typewriter. A peculiar look flashed across his face. Then he shook his massive head in an unbelieving gesture of agonized understanding.

"Hell, no," he muttered to himself. "It couldn't be. It just couldn't be. It just isn't possible. Burnett! *Burnett!*"

Swiftly he was on his feet and moving through the door after the vanished figure of the little doctor, his face a mask of grim remorse.

"It was merciful," he muttered. "Yes, it *was* merciful. It was the only thing Doc Burnett could have done."

Williams stared after Donnelly's disappearing figure in frank and open-mouthed amazement.

"Hey, Joe," he yelled. "Where the hell are you going?"

The outer door slammed shut on the departing echo of his words. "Well, I'll be hung for an ugly son!" he muttered to himself. "Nobody makes sense around this place, any more."

He shrugged half to himself and then began to type out the rest of the report.

"I don't get it," he mumbled to himself. "I just don't get it at all. There's no logic in it."



Mr. Santesson's book reviews, intended for this issue, had to be left out for the good and simple reason we did not have room for it in this crowded issue.

operation earthworm

by . . . Joe Archibald

Septimus Spink didn't need to read Jules Verne's "Journey to the Center of the Earth." He had more amazing ideas of his own.

Interplanetary Press, Circa 2022

—Septimus Spink, the first earthman to reach and return from New Mu in a flying saucer, threw a hydroactive bombshell into the meeting of the leading cosmogonists at the University of Cincinnatus today. The amazing Spink, uninvited, crashed this august body of scientists and laughed at a statement made by Professor Apsox Zalpha as to the origin of Earth and other planets.

"That theory is older than the discovery of the antiquated zipper," Spink orated. "Ha, you big plexidomes still believe the earth was condensed from a filament, and was ejected by the sun under the gravitational attraction of a big star passing close to the earth's surface. First it was a liquid drop and cooling solidified it after a period of a few million years. You citizens still think it has a liquid core. Some of you thnk it is pretty hot inside like they had atomic furnaces all fired up. Ha, the exterior ain't so hot either what with taxes we have to pay after seven wars."

Here he is again, the irrepressible Septimus Spink, in a tale as rollicking as an elder giant juggling the stars and the planets in his great, golden hands and laughing mirthfully as one tiny world—our own—goes spinning away from him into caverns measureless to man. With specifications drawn to scale, Joe Archibald, whose versatility with the quill never ceases to amaze us, has managed with slangy insouciance to achieve a rare triumph over space and time, and to aureole Spink in a resplendent sunburst of imperishable renown.

Professor Yzylch Mgogylvy, of the University of Juno, took violent exception to Septimus Spink's derisive attitude and stoutly defended the theory of adiabatic expansion. It was at this juncture that Spink practically disintegrated the meeting.

"For the last seventy years," he orated, "all we have thought about was outer space. All that we have been hepped up about is what is up in the attic and have forgot the cellar. What proof has any knucklehelmet got that nobody lives far under the coal mines and the oil pockets? Something lives everywhere! Adam never believed anythin' lived in water until he was bit by a crab. Gentlemen, I am annonncin' for the benefit of the press and everybody from here to Mars and Jupiter and back that I intend to explore inner space! I have already got the project underway."

A near panic ensued as representatives of the press made for the audio-viso stellartypes. "You think volcanos are caused by heat generated far down inside the earth. They are only boils or carbuncles. Awright, where do earthquakes come from?" Here Spink laughed once more. "They are elastic waves sent out through the body of the earth, huh? Their observed times of transmission give a means of finding their velocities of propagation at great depths. I read that in a book that should be in the Terra-firmament Institute along with the Spirit of St. Louis."

Septimus Spink walked out at this point, surrounded by Interplanetary scribes, one of whom was Exmud R. Zmorro. Spink informed the Fourteenth Estate that he would let them have a gander at the model of his inner space machine in due time. He inferred that one of his financial backers in the fabulous enterprise was Aquintax Djupont, and that the fact that Djupont had recently been brain-washed at the Neuropsychiatorium in Metropolita had no bearing on the case whatsoever.

I AM seeing and listening to that news item right now which has been repeated a dozen times the last twenty-four hours as if nobody could believe it. I am Septimus Spink, and descended from a long line of Spinks that began somewhere back at the time they put up the pyramids.

All my ancestors was never satisfied with what progress they saw during when they lived, and they are the reasons we have got where we are today. And if there was no Spinks today the scientists would get away with saying that the earth was only a drop from the sun that got a crust on it after millions of years. And they want to send me back to get fitted for a duronylon strait jacket again.

An hour after I shut off the visoscreen, and while I am taking my calves liver and onion capsules, my friend and space-lanceman, D'Ambrosia Zahooli comes in. He just

qualifies as a spaceman as he takes up very little and is not much easier to look at than a Nougatine. Once D'Ambrosia applied for a plasticectomy but the surgeons at the Muzayo clinic just laughed and told him there was a limit to science even in the year 2022. But the citizen was at home when they divided the brains. Of course that is only my opinion. He is to fly with me into inner space.

"Greetin's and salutations, and as the Martians say, 'max nabiscum,' Sep," Zahooli says. "I have been figuring that we won't have to go deeper than about four thousand kilometers. All that is worryin' me is gettin' back up. I still do not fully believe that we won't melt. Supposin' Professor Zalpha is right and that we will dive down into a core of live iron ore. You have seen them pour it out of the big dippers in the mills, Sep."

"Columbus started off like us," I says. "Who knew what he would find or where he ended up? Chris expected to fall right off the edge of the world, but did that scare him? No!"

"Of course you can count on me," Zahooli says. "When do we start building this mechanical mole?"

"In just two days," I says. "Our backers have purchased an extinct spaceship factory not far from Commonwealth Seven. Yeah, we will call our project 'Operation Earthworm,' pal."

D'Ambrosia sits down and starts looking chicken. "We wouldn't get no astrogator in his right mind to go with us, Sep. How many times the thrust will we need over what we would use if we was just cutting space? We start out in about a foot of topsoil, then some hard rock and then more hard rock. Can we harness enough energy to last through the diggin'? Do you mind if I change my mind for a very good reason which is that I'm an awful coward?"

"Of course not," I says. "It would be a coincidence if you quit though, my dear old friend, and right after Coordinator One found out who was sipping Jovian drambuie on a certain space bistro last Monday with his Venutian wife."

"You have sold me," Zahooli says. "I wouldn't miss this trip for one of those four-legged turkey farms up in Maine. It is kind of frustratin' though, don't you think, Septimus? We are still not thirty and could live another hundred years what with the new arteries they are making out of Nucrolon and the new tickers they are replacing for the old ones."

"Let us look over the model again," I says. "You are just moody today, D'Ambrosia."

It still looks like it would work to me. It is just a rocket ship pointed toward terra firma instead of the other way, and has an auger fixed in place at the nose. It is about twenty feet long and four feet wide and made out of the strongest metal known to modern science, crypto-

plutonite. It won't heat up or break off and it will start spinning around as soon as we cut loose with the tail blasts.

"How much time do we need and how much energy for only four thousand kilometers?" I asks Zahooli. "We got enough stored up to go seventy million miles into space? We'll cross that bridge when we get to the river."

"You mean the Styx?"

"That is one thing I will not believe," I sniff. "We will never find Attila the Hun or Hitler down there. Or Beezlebub."

All at once we hear a big rumbling noise and the plexidomed house we are in shakes and rattles and we are knocked out of our chairs and deposited on the seats of our corylon rompers. The viso-screen blacks out, I get to all fours and ask, "You think the Nougatines have gone to war again, D'Ambrosia?"

"It was not mice," Zahooli gulps. "It is either a hydroradium plant backfired or a good old-fashioned earthquake."

After awhile we have the viso-screen working. The face of Coordinator Five appears. He says the worst earthquake in five centuries has happened. There is a crack in the real estate of Department X6 near the Rockies that makes the Grand Canyon look like a kid just scraped a stick through some mud. Infra-Red Cross units, he says, are rocketing to the area.

"There might be somethin' goin' on inside this earth," I says. "If you don't poke a hole in a baked potato its busts right open from heat generated inside. Our project, D'Ambrosia, seems even more expedient than ever."

"That is a new word for 'insane' I must look up," Zahooli says.

Professor Apsox Zalpha comes out with a statement the next morning. He says the quake confirms his theory that the inside of the earth is as hot as a Venutian calypso number, and that gases are being generated by the heat and that we haven't volcanoes enough on the surface to allow them to escape.

Exmud R. Zmorro comes and asks me if I have an opinion.

"Ha," I laugh. "I have many on file in the Neuropsychiatorium. Just go and take your pick. However, I will give you one ad lib and sub rosa. There is more downstairs than Professor Zalpha dreams about. Who is he to say there is no civilization in inner space as well as outer? How do we know that there is not a globe inside a globe with some kind of space or atmosphere in between?"

Exmud R. Zmorro says thanks and leaves in quite a hurry. I snap off the gadget and head for my rocket jeep, and fifteen seconds later I am walking into the factory where a hundred citizens are already at work on the inner spaceship. It is listing a little to port from the quake but the head mech says it will be all straightened out in a few

hours. It is just a skeleton ship at the moment with the auger already in place and the point about three feet into the ground.

D'Ambrosia Zahooli comes in and says he has been to see Commander Bizmuth Aquinox. "He will give just enough of the atom pile for seventy million miles," he says. "And only enough superhydrogenerated radium to push us twenty million miles, Sep. I think we should write to Number One. I explained to the space brass that we have got to come up again after going down and have to reverse the blast tubes. It is radium we have to have to make the return trip. I says a half a pound would do it. You know what I think? I bet they don't believe we'll ever git back. And was their laughs dirty!"

"Skeptics have lived since the beginnin' of time," I scoff. "They laughed at Leonardo deVinci, Columbus, Edison, a guy named Durante. Even the guy who first sat down at a pianer. We will take what we can git, pal, and then come back and laugh at them."

"I wish you was more convincin'," D'Ambrosia says. "I have claustrophobia and would hate to git stuck in an over-sized fountain pen halfway to the middle of this earth."

"Hand me those plans," I says sharply. "And stop scarin' me."

Three months later we have it made. Technicians come from four planets to look at The Magnificent Mole. The area is alive with members of the Interplanetary Press, The Cosmic News Bureau, and the Universe Feature Service. Two perspiring citizens arrive and tear up two insurance policies right in front of my eyes. An old buddy of mine in the war against the Nougatines says he wants to go with me. His name is Axitope Wurpz. He has been flying cargo between Earth and Parsnipia and says he is quite unable to explain certain expense items in his book. A Parsnipian D. A. is trying to serve him a subpoena.

"You are in, Axie," I says. "A crew of three is enough as that is about all the oxygen we can store up. Meet D'Ambrosia Zahooli."

"Why is he wearing a mask?" Wurpz quips.

"You are as funny as a plutonium crutch," Zahooli says.

"No hard feelin's," Wurpz says, and takes a small flask out of his pocket. "We will drink to Operation Earthworm."

As might have been expected, we run into some snags. The Euthanasia Society serve us with papers as they maintain nobody can commit suicide in the year 2022 without permission from the Board. Gulflex and other oil companies protest to Number One as they say we might open up a hole that will spill all the petroleum out of the earth all at once, so fast they couldn't refine it. A spark could ignite it and set the globe on fire like it was a brandied Christmas pudding. But then another earthquake shakes Earth from the rice fields of China to the llamas

in Peru just when it looks as if we were about to be tossed into an outer space pokey.

The seismologists get together and agree that they can't possibly figure out the depth of the focus and state that the long waves have to pass through the epicenter or some such spot underground. Anyway, all the brass agrees that something is going on in inner space not according to Hoyle or Euclid or anybody else and that we three characters might just hit on something of scientific value.

The Magnificent Mole is built mostly of titanium, a metal which is only about half as heavy as steel and twice as rugged. It is not quite as big in diameter as the auger for if it was any Martian moron know we would scrape our sides away before we got down three miles. We store concentrated chow to last six months and get the acceleration couches ready. We are to blast down at eighteen point oh-four hours. Friday, May 26th, 2022. Today is Wednesday. The big space brass, the fourteenth estate haunt the spot marked X.

We get it both barrels from the jokers carrying press cards. They call it Operation Upside Down. At last three characters were really going to dig a hole and pull it in after them. Three hours before Dig-day, Exmud R. Zmorro interviews us. We are televised around the orbit.

"Laying all joking aside, Spink," the news analyst says dolefully, "you don't expect this to work."

"Of courst!" I says emphatically. "You forget the first man to reach New Mu was a Spink. A Spink helped Columbus wade ashore in the West Indies. The first man to invent a road-map all citizens could unfold and understand was a Spink."

Zmorro turns to Zahooli and Wurpz. "Don't ask us anythin'!" they yelp in unison. "You would only git a silly answer."

"A world inside of a world you said once, Spink. Ha—"

"Is that impossible? You have seen those ancient sailing ships built inside of a bottle, Mr. Zmorro," I says.

He paws at his dome and takes a hyperbenzadrine tablet. "Well, thank you, Septimus Spink. And have a good trip."

It is Friday. We climb up the ladder and into the Magnificent Mole. "Check everything," I says to Wurpz. You are the sub-strata astrogator."

"Rogeria. I hope this worm can turn," Wurpz says.

Zahooli checks the instruments. We don't put on space suits, but have a pressure chamber built in to insure against the bends. I wave good-bye to the citizens outside and close the door.

"I have got to git out," D'Ambrosia Zahooli says and heads for the door. "I forgot somethin'."

"Huh?"

"I forgot to resign," he says, and I pull a disintegrator Betsy on him

and tell him to hop back to the controls.

"Awright, we have computed the masses of fuel we need. Stand by for the takeoff—er, takedown. Eight seconds. Seven—Six—Five—Four—"

"I know now my mother raised one idiot," Zahooli says.

"Three seconds—two seconds—one second!" I go on. "Awright, unload the pile in one and three tubes! Then when we have gone about five hundred miles, give us the radium push."

Whir-r-r-r-r-r-r-r-r-r-o-o-om! The Mole shudders like a citizen looking at his income tax bite and then starts boring. There is a big bright light all around us, changing color every second, then there is a sound like all the pneumatomic drills in all the universe is biting through a thousand four-inch layers of titanium plate. And with it is a rumble of thunder from all the electric storms since the snake bit Cleopatra. In less than five seconds we turn on the oxygen just in case, and I jump to the instrument panel and look at the arrow on a dial.

"Hey," I yell, "we are makin' a thousand miles per hour through the ground!"

"Don't look through the ports," Wurpz says. "In passin' I saw an angleworm three times the size of a firehose, and a beetle big enough to saddle."

"Git into the compression chamber quick," I says to him. "You are gettin' hallucinations."

I turn on the air conditioning as it gets as humid in the Mole as in the Amazon jungle during the dog days. The boring inner spaceship starts screeching like a banshee.

I look at the instrument panel again and see we are close to being seven thousand miles down, and all at once the gauges show we are out of energy. I look out the port and see a fish staring in at me, and a crab with eyes like two poached eggs swimming in ketchup.

Then we are going through dirt again and all of a sudden we come out of it and I see a city below us all lit up and the buildings are made of stuff that looks like jade run through with streaks of black.

The Mole drops down about a thousand more feet and then hits the floor of the subterranean city and we land like a fountain pen with its point slammed into the top of a lump of clay. Bo-o-o-o-i-ing! We twang like a plucked harp string for nearly five minutes and I hit my noggin against the pilot's seat.

When I pick up my marbles I look around for either an Elysium field or a slag heap but instead a creep is staring down at me. He looks part human and part beetle and has a face the color of the meat of an avocado. His head is shaped like a pear standing on its stem and has two eyes spaced about six inches apart and they are as friendly as those of a spitting cobra irked by hives. He is about four feet tall and has two pairs of arms. I guess I am still a little delirious or I would

not have told the thing he would make a swell paper hanger.

The subterranean creep throws a fit and belts me with four fists. "Doomklopf!" it says, and then I really get scared as he has got a lop of hair falling down over one eye and has a black mustache the size of a Venutian four centra stamp over his mouth which is like that of a pouting goldfish.

I get to my feet and grab for a railing, and I see Wurpz and Zahooli held by two other monsters that look more like beetles than the one standing beside me.

"Zo!" the creep with the mustache says. "It is a surprise I talk Universa? We have radar and telepathometers that give us everything that is said in the upper world."

I think back and try not to. In the hermetically sealed cylinder back upstairs among my Americana Spink I have some photographs, Circa 1945. One is of a citizen of old Nazi Germany who was supposed to have cremated himself in a bunker. Papers there record that my forebear, Cyril Spink, had his doubts at the time.

"I am the Neofeuhrer, Earthman," this creep says. "I will conquer the universe."

"Look," I says, pawing beads of sweat as big as the creep's eyes from my brow, "have you been testin' atom bombs and worse down here?"

"Jar."

"There, I knew Professor Zalpha was off the beam," I yelp at Wurpz. "This is what is causin' the earthquakes."

"Come, schwine," the creep says. "I will show you something. The tomb of my ancestor. Then to the museum to show you how he arrived in Subterro in the year 1945. This is the city of Adolfus. Mach schnell! Heil Hitler. I am Agrodyte Hitler, grandson of the Liberator."

The short hairs on the back of my neck start crawling down my spine. We leave The Mole and walk along a big square paved with a mineral we never saw upstairs. Thousands of inhabitants of Subterro hiss at us and click their long black fingers. We walk up a long flight of steps and come to a cadaver memorial and on the front there are big letters and numerals in what looks like bloodstone that says: ADOLPH HITLER. 1981.

"Jar, Earthmen, mortal enemies of Subterro's hero. you thought he did not escape, hah? Come, we go to the museum."

We do. In a glass case is an antique U-boat. I can't believe it. I says to Zahooli, "Neither do I. We never took off. They have us locked up in the booby hatch in Metropolita. We went nuts."

"He escaped in a submarine, bringing three of Nazi Germany's smartest scientists with him. He brought plans showing us he could split the atom. He brought working models." The creep laughs mockingly. "We have certain elements down here also. Puranium, better

than your uranium. And pitchblend Plus Nine. It will power our fleet of submarines that will conquer Earth. It is nearly der tag! We will leave through the underground river that our benefactor found three miles below the surface of the ocean near Brazil. It spirals down through this earth and empties into Lake Schicklegruber eighty miles from here."

"And Hitler took one of those Subterro dames as a mate, huh," I says. "It figures. He was not human himself."

I get another cuffing around but I am too punchy already to feel anything. The next thing I know I am in the Subterro clink with Wurpz and Zahooli. D'Ambrosia says maybe we will get released from the strait jackets soon and get shock treatments and find ourselves back in Metropolita in our favorite night spot.

"We have to be dreamin' this," I keep telling myself. The guard looks in at us and he has little slanting eyes.

"How did Jap beetles get here?" I ask Wurpz. I shiver. I think of all the Subterro subs pouring out of a hole under Brazil and sinking all Earthian merchant marines, and shooting guided missiles that will land all over the U. S. They could have rays that would reach up over a million miles and wash up space traffic.

Then we get another jolt. They bring us our chow and say it is angleworm and halgramite porridge as that is what the Subterro denizens live on mostly. There is a salad made out of what looks like skunk cabbage leaves. We found out later that Hitler's brain trust had made an artificial sun for the Subterrors and they had been given greens for the first time and increased in size over a hundred per cent.

"We have got to escape," I says to my pals."

"That is easy," Zahooli sniffs. "First we have to break through the walls here, get to the Mole which can't never move again, and then fight off maybe six million creeps. We would git reduced to cinders by ray Betsys the minute we hit the street."

I sigh deeply and reach into my knapsack. I find some lamb stew and tapioca pudding capsules and split them with Zahooli and Wurpz. Then I come up with a little box and glance at the label. It says, URGOXA'S INSECT POWDER—Contains Radiatol.

I get up nonchalantly and call the guard to the barred window. Beetlehead sticks his face in close and asks what I want. I empty some of the powder into the palm of my hand and then blow it into his face. The Subterro sentry's eyes cross. His face turns as pale as milk and he collapses like a camp stool.

"Eureka!" I yelp. "We are in business, pals."

I hide the box of bug powder when I hear two other creeps come running. They start yaking in Universa and in bug language both.

Agrodyte Hitler appears and looks in at us.

"What happened, Great One?" I ask very politely.

"We will perform an autopsy," Hitler's grandson says, and turns to another beetlehead. "Open the door," he says. "I am showing my guests something before we exterminate them. Too bad about Voklogoo. Most likely a coronary entomothrombosis. Achtung! Raus mitt!"

"It means get the lead out in old Germanic literature," I says to Wurpz and Zahooli.

"It is curtains," D'Ambrosia gulps. "In about five minutes we will be residue."

The Neofeuhrer is like all egomaniacs before him. He wants to brag. We get into a Subterro Jetjeep and drive about twenty miles through the underground countryside to the entrance to a cave guarded by some extra tall Subterrors. Hitler the Third leads us into the spelunker's nightmare and we finally come to a big metal door about eighty feet long and twenty feet high.

Agrodyte pushes a button and the steel door lifts. Then we walk up a flight of steps to the top of a dam and take a gander at a fleet of submarines that makes Earthian pigboats look like they belonged in antique shops.

"We will take you for a ride in one," the dictator of Subterro says. "After that I will turn you over to the executioner."

"We need lawyers," Wurpz says.

We cross a thin gangplank and enter the sub. The lights in it are indirect and are purplish green. Hitler Number Three shows us the telepathic machine, the radar, and the viso-screen that pictures everything going on upstairs on Earth, and on Mars, Jupiter and all other planets. There are four other beetleheads on the sub and they carry disintegrators.

"These Subterro U-boats," our genial host brags, "can go as fast in reverse as full speed ahead, as the situation warrants. They are alive with guided missiles no larger than this flashlight I have here, but one would blow up your Metropolita and leave hardly an ash."

He looks at me, and then goes on: "We will proceed to the lock that will raise us to the underground river and cruise along its course for a few hundred miles. It is the treat I should accord such distinguished visitors from the outside of Earth, nein?"

The skipper of the Subterro sub pulls a switch and there is a noise like three contented cats purring. The metal fish slides along the surface of the underground lake and comes to a hole in a big rock ledge.

We see all this through a monitor which registers the scenery outside the sub within a radius of three miles. The sub slides into the side of the rock, and then is lifted up to the underground river that winds and winds upward like a corkscrew to the outlet under Brazil. Every

once in awhile a blast of air that smells like a dentist's office goes through the sub from bow to stern and I ask why.

"There is such terrific potency to the power we use from our puranium," Hitler Number Three says, "that we purify the air every few seconds with formula XYB and Three-fifth. The basis of the gas is galena."

I nudge Wurpz and Zahooli as the Neofeuhrer goes over to converse with his crew. "It is our big chance," I whisper. "You watch how they run this tub for the next few minutes. Then when I cough three times you be ready. I do not know how much powder it will take to knock off the big bug as he is half human. Once I blow this insect powder at the same time as the purifying blast is to take place, you two be ready to jump Agrodyte. I noticed that a small purple light flashes on over the monitor just before that stuff turns loose. It is a warning so the beetleheads can take deep breaths."

"Sep," D'Ambrosia Zahooli says. "I take back all the insults of the past five hours. Shake."

"I am doin' that already," I says. "We have to work fast while we are in the underground river."

We wait. The Neofeuhrer comes walking back to where we are sitting. The purple light flashes on, and I count to three. Just as the blast of air loaded with XYB plus cuts loose I throw all the bug powder left in the box into the current. Hitler Number Three breathes in a big gob of it and buckles a little at the knees.

"Grab him!" I screech. "Don't let him yank that disintegrator loose. Hit him with anything you see, pals!"

I see the other beetleheads collapse like they had been hit with bulldozers and I know now that insecticide is more dangerous in Subterro than all the radioactivity harnessed up on six planets.

Agrodyte Hitler, however, has some moxey left in him as he has two of his hands around Wurpz's throat, the third around Zahooli's leg and is reaching for a ray Betsy with his fourth. He grabs the disintegrator just as I belt him over his ugly noggin with a wrench about two feet long and which was certainly not made of aluminum or balsa wood.

"Himmel!" the Neofeuhrer gulps. "Ach du leebenstrum!" He has to be hit once more which is enough and we tie him up with rope that looks like it was made out of plutonium filaments.

"Well," I says. "We have a sub from Subterro. "Wurpz, you just sit there at the controls and make sure that needle on the big dial don't move as I am sure this creep has it on robot so that this tub will automatically follow the course of the river."

"We are sure takin' a powder," D'Ambrosia yelps. "Look at the monitor!"

We see fish gaping at us from

the screen that even Earth citizens with delirium tremens never saw, and I look quite anxiously at the instrument panel.

"A thousand miles per and we are climbin'," I says. "I am glad this Hitler used old Germanic on his subs, and that I majored in it once. I—er—I am gettin' arthritis all at once! The bends! Uh-er—look, peel them suits off the other creeps and fast, Zahooli, as I bet they can be inflated and made into compression chambers. They have got connections that plug into something."

We pull on the suits which were too big for the beetleheads and for a good reason. More bends than there are in the Ohio River are with us before we plug into the right socket. The suits bulge out until our feet almost leave the floor. I grin through my helmet at Wurpz.

The sub keeps purring and purring. The altimeter registers four thousand feet. It is a caution, an altimeter in a sub. Two hours later we shoot out through a hole deep under the coast of Brazil and I know we are in the ocean as the monitor shows some old wrecked ships about three miles from us. We disconnect the Subterro anti-bends kimonos and peel them off. Agrodyte Hitler is moving two of his arms when we climb toward the surface.

"Hah, we will make a sucker out of history," I says to Wurpz. "And wait until we show this creep to Professor Zalpha and Exmud R. Zmorro."

We come to the surface and contact an Earthian Franco-Austro atomic luxury liner. The skipper's pan registers on the viso screen. "This is Septimus Spink," I says. "Commander of Inner Spaceship Magnificent Mole. I have come from the center of Earth with a captured Subterro submarine and Agrodyte Hitler, the Neofeuhrer. Over and out."

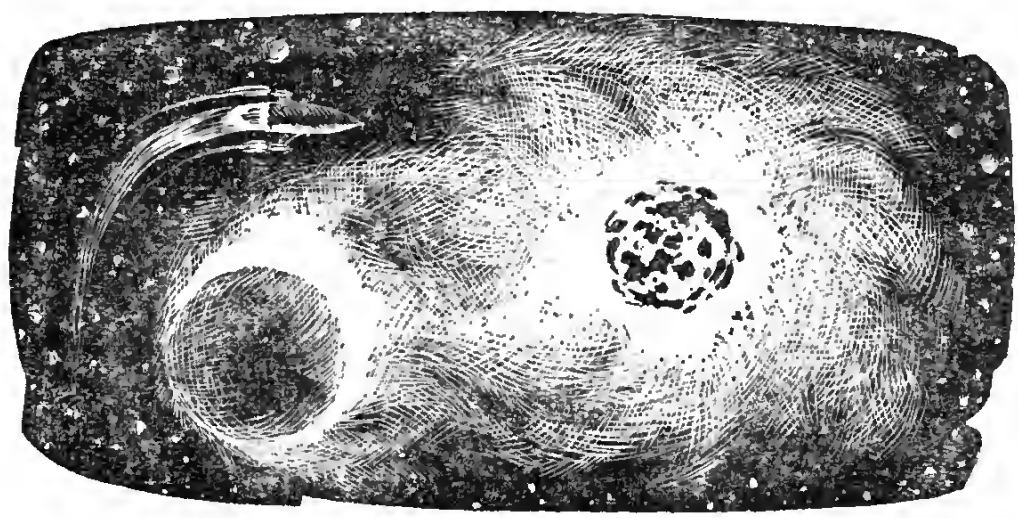
The universe goes into a cosmic dither when we slide into a berth in Hampton Rhodus. Thousands of citizens hail us as we ride to Metropolita in a Supercaddijet. Behind us in a truck trailer made mostly of transparent duralucite is our captive, the descendant of Adolph Hitler and three dead Subterro beetle people.

"Well, you won't give up so easy on a Spink from now on," I says to Zahooli. "We are heroes and will get medals. First thing we have to do, though," I says to Coordinator One sitting in the jet sedan with us, "is to take care of the hole Earth has in its head. All we have to do is drop that new bomb down the tunnel we made and it will wash up all those subs that are left and most likely cause a flood that will inundate Subterro. What do you think?"

The brass is still tongue-tied. "One thing I must do and that is see that a certain insecticide manufacturer gets a plug on Interplanetary TV," I continue. "Ha, we took the bugs out of this planet. It should work quite smooth from now on."

"I still believe in reincarnation," D'Ambrosia Zahooli says. "I have the darndest feeling I've been through almost as big nightmares with you before, Sep."

Interplanetary Press, Circa 2022, Junius XXIV—Professor Apsox Zalpha, eminent professor of cosmogony, and Exmud R. Zmorro, leading news analyst of seven worlds, have entered the Metropolita Neuropsychiatorium for a routine checkup. They emphatically denied that it was connected in any way with a lecture given recently by Septimus Spink, first man to explore inner space, at the Celestial Cow Palace in San Francisco. Both men expect to remain for two weeks. "Of course there is nothing wrong with either of us," Professor Zalpha told your correspondent. "But if you see a beetle, please do not step on it. It could be somebody's mother."



"Not lightly did men walk the nighted streets of Asgalun, for in the dark, winding alleys of that fabulous river quarter anything might happen." Anything might—and does—in one of the most stirringly imaginative, glamorously exciting lead novelettes it has ever been our privilege to bring you. It's called HAWKS OVER SHEM *and it's a Conan the Barbarian yarn by the late, great Robert E. Howard, enhanced by the year of grace 1955 collaborative talents of that superlatively sophisticated and witty wielder of a wicked satiric pen, L. Sprague de Camp. Here's a next-issue special you won't want to miss.*

the hoofer

by . . . Walter M. Miller, Jr.

A space rover has no business with a family. But what can a man in the full vigor of youth do—if his heart cries out for a home?

THEY ALL knew he was a spacer because of the white goggle marks on his sun-scorched face, and so they tolerated him and helped him. They even made allowances for him when he staggered and fell in the aisle of the bus while pursuing the harassed little housewife from seat to seat and cajoling her to sit and talk with him.

Having fallen, he decided to sleep in the aisle. Two men helped him to the back of the bus, dumped him on the rear seat, and tucked his gin bottle safely out of sight. After all, he had not seen Earth for nine months, and judging by the crusted matter about his eyelids, he couldn't have seen it too well now, even if he had been sober. Glare-blindness, gravity-legs, and agoraphobia were excuses for a lot of things, when a man was just back from Big Bottomless. And who could blame a man for acting strangely?

Minutes later, he was back up the aisle and swaying giddily over the little housewife. "How!" he said. "Me Chief Broken Wing. You wanta Indian wrestle?"

The girl, who sat nervously star-

A wayfarer's return from a far country to his wife and family may be a shining experience, a kind of second honeymoon. Or it may be so shadowed by Time's relentless tyranny that the changes which have occurred in his absence can lead only to tragedy and despair. This rarely discerning, warmly human story by a brilliant newcomer to the science fantasy field is told with no pulling of punches, and its adroit unfolding will astound you.

ing at him, smiled wanly, and shook her head.

"Quiet li'l pigeon, aren'tcha?" he burbled affectionately, crashing into the seat beside her.

The two men slid out of their seats, and a hand clamped his shoulder. "Come on, Broken Wing, let's go back to bed."

"My name's Hogey," he said. "Big Hogey Parker. I was just kidding about being a Indian."

"Yeah. Come on, let's go have a drink." They got him on his feet, and led him stumbling back down the aisle.

"My ma was half Cherokee, see? That's how come I said it. You wanta hear a war whoop? Real stuff."

"Never mind."

He cupped his hands to his mouth and favored them with a blood-curdling proof of his ancestry, while the female passengers stirred restlessly and hunched in their seats. The driver stopped the bus and went back to warn him against any further display. The driver flashed a deputy's badge and threatened to turn him over to a constable.

"I gotta get home," Big Hogey told him. "I got me a son now, that's why. You know? A little baby pigeon of a son. Haven't seen him yet."

"Will you just sit still and be quiet then, eh?"

Big Hogey nodded emphatically. "Shorry, officer, I didn't mean to make any trouble."

When the bus started again, he fell on his side and lay still. He made retching sounds for a time, then rested, snoring softly. The bus driver woke him again at Caine's junction, retrieved his gin bottle from behind the seat, and helped him down the aisle and out of the bus.

Big Hogey stumbled about for a moment, then sat down hard in the gravel at the shoulder of the road. The driver paused with one foot on the step, looking around. There was not even a store at the road junction, but only a freight building next to the railroad track, a couple of farmhouses at the edge of a side-road, and, just across the way, a deserted filling station with a sagging roof. The land was Great Plains country, treeless, barren, and rolling.

Big Hogey got up and staggered around in front of the bus, clutching at it for support, losing his duffle bag.

"Hey, watch the traffic!" The driver warned. With a surge of unwelcome compassion he trotted around after his troublesome passenger, taking his arm as he sagged again. "You crossing?"

"Yah," Hogey muttered. "Lemme alone, I'm okay."

The driver started across the highway with him. The traffic was sparse, but fast and dangerous in the central ninety-mile lane.

"I'm okay," Hogey kept protesting. "I'm a tumbler, ya know? Gravity's got me. Damn gravity."

I'm not used to gravity, ya know? I used to be a tumbler—*huk!*—only now I gotta be a hoofer. 'Count of li'l Hogey. You know about li'l Hogey?"

"Yeah. Your son. Come on."

"Say, you gotta son? I bet you gotta son."

"Two kids," said the driver, catching Hogey's bag as it slipped from his shoulder. "Both girls."

"Say, you oughta be home with them kids. Man oughta stick with his family. You oughta get another job." Hogey eyed him owlishly, waggled a moralistic finger, skidded on the gravel as they stepped onto the opposite shoulder, and sprawled again.

The driver blew a weary breath, looked down at him, and shook his head. Maybe it'd be kinder to find a constable after all. This guy could get himslef killed, wandering around loose.

"Somebody supposed to meet you?" he asked, squinting around at the dusty hills.

"*Huk!*—who, me?" Hogey giggled, belched, and shook his head. "Nope. Nobody knows I'm coming. S'prise. I'm supposed to be here a week ago." He looked up at the driver with a pained expression. "Week late, ya know? Marie's gonna be sore—woo-*hoo!*—is she gonna be sore!" He waggled his head severely at the ground.

"Which way are you going?" the driver grunted impatiently.

Hogey pointed down the sideroad that led back into the hills. "Marie's pop's place. You know where? 'Bout three miles from here. Gotta walk, I guess."

"Don't," the driver warned. "You sit there by the culvert till you get a ride. Okay?"

Hogey nodded forlornly.

"Now stay out of the road," the driver warned, then hurried back across the highway. Moments later, the atomic battery-driven motors droned mournfully, and the bus pulled away.

Big Hogey blinked after it, rubbing the back of his neck. "Nice people," he said. "Nice buncha people. All hoofers."

With a grunt and a lurch, he got to his feet, but his legs wouldn't work right. With his tumbler's reflexes, he fought to right himself with frantic arm motions, but gravity claimed him, and he went stumbling into the ditch.

"Damn legs, damn crazy legs!" he cried.

The bottom of the ditch was wet, and he crawled up the embankment with mud-soaked knees, and sat on the shoulder again. The gin bottle was still intact. He had himself a long fiery drink, and it warmed him deep down. He blinked around at the gaunt and treeless land.

The sun was almost down, forgered on a dusty horizon. The blood-streaked sky faded into sulphurous yellow toward the zenith, and the very air that hung over the land seemed full of yellow smoke, the omnipresent dust of the plains.

A farm truck turned onto the

side-road and moaned away, its driver hardly glancing at the dark young man who sat swaying on his duffllebag near the culvert. Hogey scarcely noticed the vehicle. He just kept staring at the crazy sun.

He shook his head. It wasn't really the sun. The sun, the real sun, was a hateful eye-sizzling horror in the dead black pit. It painted everything with pure white pain, and you saw things by the reflected pain-light. The fat red sun was strictly a phoney, and it didn't fool him any. He hated it for what he knew it was behind the gory mask, and for what it had done to his eyes.

With a grunt, he got to his feet, managed to shoulder the duffle bag, and started off down the middle of the farm road, lurching from side to side, and keeping his eyes on the rolling distances. Another car turned onto the side-road, honking angrily.

Hogey tried to turn around to look at it, but he forgot to shift his footing. He staggered and went down on the pavement. The car's tires screeched on the hot asphalt. Hogey lay there for a moment, groaning. That one had hurt his hip. A car door slammed and a big man with a florid face got out and stalked toward him, looking angry.

"What the hell's the matter with you, fella?" he drawled. "You soused? Man, you've really got a load."

Hogey got up doggedly, shaking his head to clear it. "Space legs," he prevaricated. "Got space legs. Can't stand the gravity."

The burly farmer retrieved his gin bottle for him, still miraculously unbroken. "Here's your gravity," he grunted. "Listen, fella, you better get home pronto."

"Pronto? Hey, I'm no Mex. Honest, I'm just space burned. You know?"

"Yeah. Say, who are you, anyway? Do you live around here?"

It was obvious that the big man had taken him for a hobo or a tramp. Hogey pulled himself together. "Goin' to the Hauptman's place. Marie. You know Marie?"

The farmer's eyebrows went up. "Marie Hauptman? Sure I know her. Only she's Marie Parker now. Has been, nigh on six years. Say—" He paused, then gaped. "You ain't her husband by any chance?"

"Hogey, that's me. Big Hogey Parker."

"Well, I'll be—! Get in the car. I'm going right past John Hauptman's place. Boy, you're in no shape to walk it."

He grinned wryly, waggled his head, and helped Hogey and his bag into the back seat. A woman with a sun-wrinkled neck sat rigidly beside the farmer in the front, and she neither greeted the passenger nor looked around.

"They don't make cars like this anymore," the farmer called over the growl of the ancient gasoline engine and the grind of gears. "You can have them new atomics with their loads of hot isotopes

under the seat. Ain't safe, I say—eh, Martha?"

The woman with the sun-baked neck quivered her head slightly. "A car like this was good enough for Pa, an' I reckon it's good enough for us," she drawled mournfully.

Five minutes later the car drew in to the side of the road. "Reckon you can walk it from here," the farmer said. "That's Hauptman's road just up ahead."

He helped Hogey out of the car and drove away without looking back to see if Hogey stayed on his feet. The woman with the sun-baked neck was suddenly talking garrulously in his direction.

It was twilight. The sun had set, and the yellow sky was turning gray. Hogey was too tired to go on, and his legs would no longer hold him. He blinked around at the land, got his eyes focused, and found what looked like Hauptman's place on a distant hillside. It was a big frame house surrounded by a wheatfield, and a few scrawny trees. Having located it, he stretched out in the tall grass beyond the ditch to take a little rest.

Somewhere dogs were barking, and a cricket sang creaking monotony in the grass. Once there was the distant thunder of a rocket blast from the launching station six miles to the west, but it faded quickly. An A-motored convertible whined past on the road, but Hogey went unseen.

When he awoke, it was night, and he was shivering. His stomach was screeching, and his nerves dancing with high voltages. He sat up and groped for his watch, then remembered he had pawned it after the poker game. Remembering the game and the results of the game made him wince and bite his lip and grope for the bottle again.

He sat breathing heavily for a moment after the stiff drink. Equating time to position had become second nature with him, but he had to think for a moment because his defective vision prevented him from seeing the Earth-crescent.

Vega was almost straight above him in the late August sky, so he knew it wasn't much after sundown—probably about eight o'clock. He braced himself with another swallow of gin, picked himself up and got back to the road, feeling a little sobered after the nap.

He limped on up the pavement and turned left at the narrow drive that led between barbed-wire fences toward the Hauptman farmhouse, five hundred yards or so from the farm road. The fields on his left belonged to Marie's father, he knew. He was getting close—close to home and woman and child.

He dropped the bag suddenly and leaned against a fence post, rolling his head on his forearms and choking in spasms of air. He was shaking all over, and his belly writhed. He wanted to turn and run. He wanted to crawl out in the grass and hide.

What were they going to say?

And Marie, Marie most of all. How was he going to tell her about the money?

Six hitches in space, and every time the promise had been the same: *One more tour, baby, and we'll have enough dough, and then I'll quit for good. One more time, and we'll have our stake—enough to open a little business, or buy a house with a mortgage and get a job.*

And she had waited, but the money had never been quite enough until this time. This time the tour had lasted nine months, and he had signed on for every run from station to moon-base to pick up the bonuses. And this time he'd made it. Two weeks ago, there had been forty-eight hundred in the bank. And now . . .

"Why?" he groaned, striking his forehead against his forearms. His arm slipped, and his head hit the top of the fencepost, and the pain blinded him for a moment. He staggered back into the road with a low roar, wiped blood from his forehead, and savagely kicked his bag.

It rolled a couple of yards up the road. He leaped after it and kicked it again. When he had finished with it, he stood panting and angry, but feeling better. He shouldered the bag and hiked on toward the farmhouse.

They're hoofers, that's all—just an Earth-chained bunch of hoofers, even Marie. And I'm a tumbler. A born tumbler. Know what that means? It means—God, what does it mean? It means out in Big Bottomless, where Earth's like a fat moon with fuzzy mold growing on it. Mold, that's all you are, just mold.

A dog barked, and he wondered if he had been muttering aloud. He came to a fence-gap and paused in the darkness. The road wound around and came up the hill in front of the house. Maybe they were sitting on the porch. Maybe they'd already heard him coming. Maybe . . .

He was trembling again. He fished the fifth of gin out of his coat pocket and sloshed it. Still over half a pint. He decided to kill it. It wouldn't do to go home with a bottle sticking out of his pocket. He stood there in the night wind, sipping at it, and watching the reddish moon come up in the east. The moon looked as phoney as the setting sun.

He straightened in sudden determination. It had to be sometime. Get it over with, get it over with now. He opened the fence-gap, slipped through, and closed it firmly behind him. He retrieved his bag, and waded quietly through the tall grass until he reached the hedge which divided an area of sickly peach trees from the field. He got over the hedge somehow, and started through the trees toward the house. He stumbled over some old boards, and they clattered.

"Shhh!" he hissed, and moved on.

The dogs were barking angrily, and he heard a screen door slam. He stopped.

"Ho there!" a male voice called experimentally from the house.

One of Marie's brothers. Hogey stood frozen in the shadow of a peach tree, waiting.

"Anybody out there?" the man called again.

Hogey waited, then heard the man muttering, "Sic 'im, boy, sic 'im."

The hound's bark became eager. The animal came chasing down the slope, and stopped ten feet away to crouch and bark frantically at the shadow in the gloom. He knew the dog.

"Hooky!" he whispered. "Hooky boy—here!"

The dog stopped barking, sniffed, trotted closer, and went *"Rrrooff!"* Then he started sniffing suspiciously again.

"Easy, Hookey, here boy!" he whispered.

The dog came forward silently, sniffed his hand, and whined in recognition. Then he trotted around Hogey, panting doggy affection and dancing an invitation to romp. The man whistled from the porch. The dog froze, then trotted quickly back up the slope.

"Nothing, eh, Hookey?" the man on the porch said. "Chasin' armadillos again, eh?"

The screen door slammed again, and the porch light went out. Hogey stood there staring, unable to think. Somewhere beyond the window lights were—his woman, his son.

What the hell was a tumbler doing with a woman and a son?

After perhaps a minute, he stepped forward again. He tripped over a shovel, and his foot plunged into something that went *squelch* and swallowed the foot past the ankle. He fell forward into a heap of sand, and his foot went deeper into the sloppy wetness.

He lay there with his stinging forehead on his arms, cursing softly and crying. Finally he rolled over, pulled his foot out of the mess, and took off his shoes. They were full of mud—sticky sandy mud.

The dark world was reeling about him, and the wind was dragging at his breath. He fell back against the sand pile and let his feet sink in the mud hole and wriggled his toes. He was laughing soundlessly, and his face was wet in the wind. He couldn't think. He couldn't remember where he was and why, and he stopped caring, and after awhile he felt better.

The stars were swimming over him, dancing crazily, and the mud cooled his feet, and the sand was soft behind him. He saw a rocket go up on a tail of flame from the station, and waited for the sound of its blast, but he was already asleep when it came.

It was far past midnight when he became conscious of the dog licking wetly at his ear and cheek. He pushed the animal away with a low

curse and mopped at the side of his face. He stirred, and groaned. His feet were burning up! He tried to pull them toward him, but they wouldn't budge. There was something wrong with his legs.

For an instant he stared wildly around in the night. Then he remembered where he was, closed his eyes and shuddered. When he opened them again, the moon had emerged from behind a cloud, and he could see clearly the cruel trap into which he had accidentally stumbled. A pile of old boards, a careful stack of new lumber, a pick and shovel, a sand-pile, heaps of fresh-turned earth, and a concrete mixer—well, it added up.

He gripped his ankles and pulled, but his feet wouldn't budge. In sudden terror, he tried to stand up, but his ankles were clutched by the concrete too, and he fell back in the sand with a low moan. He lay still for several minutes, considering carefully.

He pulled at his left foot. It was locked in a vise. He tugged even more desperately at his right foot. It was equally immovable.

He sat up with a whimper and clawed at the rough concrete until his nails tore and his fingertips bled. The surface still felt damp, but it had hardened while he slept.

He sat there stunned until Hooky began licking at his scuffed fingers. He shouldered the dog away, and dug his hands into the sand-pile to stop the bleeding. Hooky licked at his face, panting love.

"Get away!" he croaked savagely.

The dog whined softly, trotted a short distance away, circled, and came back to crouch down in the sand directly before Hogey, inching forward experimentally.

Hogey gripped fistfuls of the dry sand and cursed between his teeth, while his eyes wandered over the sky. They came to rest on the sliver of light—the space station—rising in the west, floating out in Big Bottomless where the gang was—Nichols and Guerrera and Lavrenti and Fats. And he wasn't forgetting Keesey, the rookie who'd replaced him.

Keesey would have a rough time for awhile—rough as a cob. The pit was no playground. The first time you went out of the station in a suit, the pit got you. Everything was falling, and you fell with it. Everything. The skeletons of steel, the tire-shaped station, the spheres and docks and nightmare shapes—all tied together by umbilical cables and flexible tubes. Like some crazy sea-thing they seemed, floating in a black ocean with its tentacles bound together by drifting strands in the dark tide that bore it.

Everything was pain-bright or dead black, and it wheeled around you, and you went nuts trying to figure which way was down. In fact, it took you months to teach your body that *all* ways were down and that the pit was bottomless.

He became conscious of a plain-

tive sound in the wind, and froze to listen.

It was a baby crying.

It was nearly a minute before he got the significance of it. It hit him where he lived, and he began jerking frantically at his encased feet and sobbing low in his throat. They'd hear him if he kept that up. He stopped and covered his ears to close out the cry of his firstborn. A light went on in the house, and when it went off again, the infant's cry had ceased.

Another rocket went up from the station, and he cursed it. Space was a disease, and he had it.

"Help!" he cried out suddenly. "I'm stuck! Help me, help me!"

He knew he was yelling hysterically at the sky and fighting the relentless concrete that clutched his feet, and after a moment he stopped.

The light was on in the house again, and he heard faint sounds. The stirring-about woke the baby again, and once more the infant's wail came on the breeze.

Make the kid shut up, make the kid shut up . . .

But that was no good. It wasn't the kid's fault. It wasn't Marie's fault. No fathers allowed in space, they said, but it wasn't their fault either. They were right, and he had only himself to blame. The kid was an accident, but that didn't change anything. Not a thing in the world. It remained a tragedy.

A tumbler had no business with a family, but what was a man going to do? Take a skinning knife, boy, and make yourself a eunuch. But that was no good either. They needed bulls out there in the pit, not steers. And when a man came down from a year's hitch, what was he going to do? Live in a lonely shack and read books for kicks? Because you were a man, you sought out a woman. And because she was a woman, she got a kid, and that was the end of it. It was nobody's fault, nobody's at all.

He stared at the red eye of Mars low in the southwest. They were running out there now, and next year he would have been on the long long run . . .

But there was no use thinking about it. Next year and the years after belonged to *little* Hogey.

He sat there with his feet locked in the solid concrete of the footing, staring out into Big Bottomless while his son's cry came from the house and the Hauptman menfolk came wading through the tall grass in search of someone who had cried out. His feet were stuck tight, and he wouldn't ever get them out. He was sobbing softly when they found him.

the sun hunters

by . . . Joe L. Hensley

Mercury may be the hottest planet in the Solar System. But neither fire nor the threat of death can defeat a coolly courageous man.

TOM NIGAN shivered a little in spite of the intense heat inside his suit. The sun lay fearsomely on Mercury's horizon, like a huge, burning firefly. If there had been any other creature alive on the planet's surface—apart from the human beings who fought the heat and fire—the effect might have been different.

But the sun was the one great enemy. Its anger was hot and sudden and constant, paling and dwarfing the cold planning of men. It reduced to insignificance all other anger and fear. Even the men behind him were as nothing to the sun.

It was hard not to endow that immense, mercilessly burning orb with a super mentality and malice. That was why so many men lost their nerve and their sanity—why Tom had almost lost his own nerve. Only Aleck's experience and calmness had saved him.

And as if that had not been enough of a debt, there was the new, raw debt in blood and heat that Aleck had paid for him. And both debts must be repaid, not be-

Joe L. Hensley, whose stories have appeared in most of the leading science fantasy magazines, is about to leave for the capital of his native state to take his bar examinations. Curiously enough, there are not many members of the legal profession who also write imaginative science stories. Perhaps Mr. Hensley can tell us why, or the answer may lie concealed in the exciting pages of this unusual yarn. Whatever the reason, he has boldly defied it.

cause Aleck expected them to be, but because a man is born a man—and remains one under the burning sun.

Tom felt Aleck stumble. He stopped and put his helmet up against the headpiece of his companion. "Can't stop now. They're not very far behind," he said, enunciating each word clearly. It was not safe to use the helmet radios, for they could listen in, and receive invaluable instructions from them if they were spread out in a search pattern. "How's the shoulder?" he asked.

Faintly he thought Aleck mumbled something in reply. He walked around in back of the man and checked the patch in the shoulder of the suit where the missile had entered. It seemed secure. But he knew that Aleck was horribly hurt, not only from the wound in the muscle of the shoulder, but from the heat that had gotten in and the air that had escaped, despite the speed with which Tom had patched the suit. If only he could look through the black glass vizor and see Aleck's face—

He was glad that the suits were practically infallible. They were so heavy that small motors helped to run them. A man moved his legs or arms, and the suits followed. Even if Aleck should fall into unconsciousness the suit would continue to carry him over the ground as long as Tom kept pushing him, keeping the suit in automatic motion.

But Aleck was not unconscious. Aleck would be all right. He *had* to be. For Aleck had given Tom his chance and Aleck's body had shielded him when the men pursuing them had begun to fire.

The heat around them was like a sentient thing. Even as Tom watched there was a small explosion in one of the soupy lakes within his line of vision. The soft lava shot up toward the sun and then fell back again silently. A few drops pattered against Tom's suit as he hurried Aleck on.

He had counted three men in the group that had attacked them, but that meant little. There might be more. He knew, of course, what it was they were after, even though this was his first trip into the Mercurian Sunlands. They were after sunstones—the easy way.

He had heard other hunters speak of the bandits back in Twilight City. They called them, "followers." They waited until some fool came back from a prospecting trip, staying close to the mountains where the darkness of twilight land began. Then they ambushed him when he was tired and off guard and afraid only of the giant in the sky, when he was not even watching for the evil in his own kind.

They made sure he had no gun—and few travelers did because of the technical difficulties of carrying a weapon in the seven thousand degree heat—and then they closed in relentlessly.

They had tried twice to kill him. They were still trying. They were

back there, lost in the red haze, a few yards or maybe a few miles. And following—mercilessly following.

Tom touched the hand claw of his suit against the box attached to a belt at his side. Even in the claw it felt heavy as he hefted it. Sunstones, over seventy of them, one of the richest strikes that any traveler had ever made. And on his first trip—though Aleck had been out before.

If worst came to worst he would throw that box away—out into the muck of one of the molten lakes where it would be safe forever. But now was not the time to think of that. He hurried the wounded man on with him. There was no time for rest, though his body cried out for it. The crew of followers were fresh. Stopping meant death.

On and on, watching for the soft, red pools where the surface had liquified and must be avoided, pushing Aleck along ahead of him. Through the dark glass of the helmet the ground was a glowing, ghostlike thing, dimly seen, despite the light of the giant sun.

Gradually fatigue began to work its deadly way through his muscles and brain and twice he fell asleep for an instant. At those times, when he snapped back to consciousness, it was not Mercury he was on. He was in a deep, dark pit and the huge sun was a devil god that laughed at him.

He stumbled upon the cave by accident—a most fortunate accident. The opening to it was sheltered and hard to see, and he realized instantly that the followers would have to pass very close to the entrance to find it. But it had one disadvantage. It would put their pursuers in front of them and give the remorseless trackers an opportunity to lay a trap. But he had no choice. He must rest.

Tom pushed the unprotesting Aleck ahead of him into the shelter of the cave, continuing on until he could no longer see the reflected light of the sun. He put his helmet against that of the injured man.

"Lie down, Aleck," he said. "Rest."

For a long moment the other man stood motionless. Tom waited patiently until he was sure that Aleck was either unconscious or too weak to help himself . . . or dead. He refused to even think of the last possibility. He activated the controls outside of both suits which afforded him enough flexibility to enable him to lie down.

Even then he had to push Aleck to the floor.

Tom was so tired that he could not immediately sleep. Instead his mind wandered back to Twilight City. He was sitting in a bar with Aleck, a cold drink in front of him.

"Why are you taking me?" he asked Aleck. "You could have your choice of partners—as many as you've been out with in the Sunlands. Not that I'm not grateful. But you seem to forget that I'm a greenhorn. The first time I look up at that big sun I may turn and run."

The older man smiled softly. "I may run with you. You can crack up just as easily the fifteenth time out as you can the first. I must take my chances on that, just as you must." He stopped smiling. "Look around you at the men in this bar. Almost all of them profess to be honest gem hunters. Some of them actually are but half of them aren't. It just happens that no man I can be sure is absolutely honest is ready to go out. I'm ready to go and you are too—and I think you are honest. If you aren't then I shall have the small advantage over you of having been out before."

Aleck smiled again. "There has to be a first time for everyone. There is only one thing you must promise me and that I will promise you. No matter what happens out there—if one of us comes back the other does too."

A glint of emotion came into his eyes, then fleeted away. "I have an aversion to dying out there. Seems silly for a professional Sunstoner to be afraid of dying in the sun, but that's the way it is." His voice lowered. "The second time I was out I lost my partner. The sun got to him and he wandered off. I searched too long before I found him. A man wasn't made to be out there by himself. So we've got to stick together."

"I promise that if I get back you will also," Tom said.

Aleck's face was somber. "Your promise is enough for me."

For a time there was silence at the table. A fight began at the bar and they watched that with interest. A man played a tired piano across the room, unnoticed. A few "professional" women passed in and out between the tables.

"Tell me about your wife," Aleck said again.

Tom smiled. "I've already told you twice."

"It helps to know that another man beside myself has been a fool," Aleck said.

"I've been married six years. We have a son. Things just didn't work out for me on Earth. I guess I'm too restless to hold onto the same job for long. I kept losing them and having a tough time getting another. We spent every cent we had so that I could come out here and try my luck. She's staying with her parents—who don't think too much of me. If I have any luck out here then she'll join me and bring our son." Tom smiled. "Earth is so settled now that there has to be a hole for every peg. I couldn't find mine."

"My wife did not wait," Aleck said. "But that is another story, another woman." He lifted his glass, his eyes hard and lost. "To the beautiful, the dangerous, the rare. To women and to the sunstones."

He drank the drink down. Tom was suddenly aware of the reason why Aleck had picked him. It was not for the reasons the older man had given, but because he saw in Tom a reflection of what he, Aleck, had been—something lost and never found.

Someone at the bar had overheard

Aleck's toast. A host of glasses came up and two men—the same two who had been fighting before—began a slow, plaintive song, their arms around each other's shoulders in drunken brotherhood. In a moment all the men in the bar were singing it, except Tom, who had never heard it before, and Aleck, who turned his head away.

"He rose to touch the Sun God
And into it he fell.
His bones lie in Hot Valley.
He'll see his friends in hell.
Sunstones are for the lucky;
The fools who have a run.
Most fools lie in Sun Valley
A-burnin' in the sun."

When the song was done and the last two lines of the chorus had been repeated there was a tiny moment of silence. And then the bar noise began again.

"Well, Tom," Aleck said harshly, "tomorrow we go."

"Tomorrow—we go," Tom repeated.

And they had gone.

Up over the ridges of mountains that shadowed the twilight land of Mercury, over the top, then down into the fabled land—the land of death and fire and heat.

"Don't look at the sun," Aleck warned.

But you could not help looking. You knew it was there. You could feel it, even with eyes chained to the ground. It dominated everything. There was no night out here—only in the shifting, dangerous caves could a man escape into blessed darkness.

Then the find—the fool's luck find. It had happened the sixth day out, the sixth day of picking at the hot crust in likely spots and finding only one tiny specimen, so small as to be of almost no value.

Tom had lost his balance on a steep rise, just as they had been about ready to turn back and call it a bad trip. He had reached out with the pick and dug it deep into the earth to hold himself upright. He had caught his balance and then carelessly pulled the pick out—to expose a great bed of the fabulous jewels, the most beautiful jewels of any world. Red—they were the bright shining red of the sun.

Aleck's quiet, exultant voice came back to him: "And you asked why I wanted to bring *you* along . . ."

Another day of jubilantly picking the pocket clean. They knew as they worked that they might never be able to find the spot on their return, for the land constantly shifted and changed as the great heat and drag of the sun crumbled it, forming new lakes, and covering the old ones.

Then the return—and the ambush. Aleck's body sheltering his own when the firing began, and Aleck's voice as he was hit: "Your wife, Tom . . . your . . ." Desperate words unspoken. Then the radio had clicked off, and the explosive pellets had started whining.

The followers could have had them both then, if they had come

in. But they had stayed at a distance, firing and missing.

Then running.

Tom drifted off now into the sleep of dreams and tortured memories of a red-haired girl of Earth holding a huge beaker of water enticingly in front of her. It was with difficulty that he recognized her as his wife. The water was more important. Somewhere in the distance he could hear the sound of the surging sea. And the rain—great storms of it that drenched and choked him with exultation.

When he awoke he could hear the tiny whine of his refrigerating unit laboring to cool his suit to livable temperature. Aleck lay supine and unmoving. Laboriously he got the other man to his feet.

"Not much further," he said against his companion's helmet. "We can't be more than a day out."

Once again he thought he heard the other man mumble something back. But when he released his hold on the suited figure Aleck slumped limply back to the floor of the cave. Resolutely Tom pulled him to his feet again. There was no time to waste. The luminous dial of his own water gauge above the eyepiece of his helmet stood almost at zero.

He took a few warm sips of the brackish water through his tube. Then he held the other man erect and felt along the back of the suit for the controls that made the garment rigid. He found them, pressed the lever down, and began to push Aleck along in front of him. The light came quickly as they neared the entrance.

And then they were out in the world of the sun again.

It had been dangerous to stay in the cave. The crust might have buckled and buried them, but Tom was glad he had taken the chance and gained a desperately needed respite from the intolerable heat and the mental torment of knowing they were constantly in danger of being encircled by the untiring bandits.

They had advanced only a few yards when the pursuit began again.

The explosive pellet hit an inch away from Tom, splattering the hot wall of the cave mouth in soundless fury. He saw a form rise up only a short distance away, bolder now, trying for a sure shot. Tom released his hold on Aleck and grabbed at the pick hanging from the metal belt of his suit.

The pick came free. He saw the gun center on him and threw the pick at the follower in desperation. The man tried to jerk away, but the sharp end of the pick went through his metal suit and hung there grotesquely. Tom felt, rather than heard, the scream as the gunman died.

Another form arose from the shadows.

He cautiously raised his pellet gun, clutching it with both hands awkwardly. It was dangerous to keep a pellet gun out of its cooled holster for very long, for the heat could explode it. But it was a risk he had to take.

There was an indistinct flash of motion to the right and tiny pellets of rock rang down against his metal helmet as one of the other attackers fired and missed.

He swung the gun in the direction of the blasts, and fired three times.

The second attacker had his radio on. Tom's receiver picked up the sounds of his screams as the heat blasted in through the gaping hole a luckily-placed shot had blown in the suit. The screams continued for a full minute, then dwindled to a tiny, inhuman mockery of sound.

The last follower flashed up then into clear view. He was running away. Tom brought the gun up, steadied it, and fired until the cylinder jammed. The man ran on, away from the hills of the twilight zone. Tom felt no sorrow or remorse for the men he had killed. He regretted only that one had gotten away.

Aleck still stood motionless at his side, his shoulders sagging. The refrigerating unit on Tom's back was laboring—the sound uneven and raspy. A fragment of one of the explosive pellets had damaged it, how seriously he did not know.

He turned his transmitter on at low power. "Come on, Aleck," he pleaded. "We've got to go on. My unit is damaged." He waited for the other man to reply, but no sound came. Either Aleck was unconscious or too weak to talk. Supporting him with one arm, he struggled forward, and found with relief that the stricken man's feet moved automatically.

Somewhere up ahead there was a sharp rise where the heat slowly abated and the twilight zone began. Finding it was simply a matter of keeping the sun at one's back. But already two-thirds of the sun's disk had fallen below the horizon and the temperature in his suit had risen to the danger point.

The thought of leaving Aleck occurred to him and was instantly rejected. He could never do that. There was the promise and the debt. A man did what he had to do, even though it meant accepting a burden that was dangerously slowing his progress and slimming his chances.

On and on the pair went. At times the ground was sandy, at times hard and flaky where the slag had dried. No wind ruffled the surface for there was no atmosphere. But the heat rose up from the ground through the suit and from the slender crescent of sun. The suit grew hotter and hotter. Tiny flecks of steam covered his visor now, obscuring his vision and his skin burned as his inner clothing brushed against it. Each step was a torment.

He stopped and held his breath for a moment so that the steam might clear away. They were on a high place. The sun had almost sunk behind the horizon, but the bloody tip still showed.

"Go on, Aleck!" Tom urged desperately. He gave the other man a prod and the automatic suit took

three steps and then stopped. *He won't leave me either,* Tom thought wildly.

He turned and shook a feeble fist at the sun and then put his back to his task again.

The rest was confused. There was a stumbling and a crying out and the gasping sound of his own breathing. Then, mercifully, there was nothing for a long time.

He awakened in a clean white bed. Bandages swathed his hands and his head and body were covered with a cool, soothing ointment. Looking down he could see other bandages where the burns were painfully severe.

He ached all over. He felt his legs moving below him and looked down at them in surprise. They were making automatic walking motions. It took a great effort of will to control them.

He did not feel thirsty. There was a pitcher of water on the bedside stand near him, but the sight did not excite him. He reached out and touched it, then drew his hand back once he was sure it was real.

For a long time he lay there.

The doctor was a big, bluff man, a busy man. Tom had almost slipped back into sleep when he entered.

"Back with us, eh?" he said. "You've been out for almost a week."

"Yes," Tom said.

"I suppose you'll be wanting to know about the sunstones?" The doctor brushed at his immaculate pants with his gloved hands. "Well, I've put them in the safe, and so far nobody knows—"

"I don't really care. How is my partner, Aleck?"

"It was good of you to bring him back," the doctor said. "You rambled some in your fever and I've a pretty good idea as to what happened. The followers." He cocked his head. "It's too bad we don't have much law up here."

"How is Aleck—how is my partner? I want to know?"

The doctor brushed with his hand at his thinning hair. "I'd say he died very soon after he was wounded."

"But . . ."

"The heat keeps rigor mortis from setting in." The doctor was silent for a moment. "He's not the first." His voice softened. "I'm sorry." He turned and went on out of the room.

Tom covered his eyes with his bandaged hands, seeing the sunland, feeling again the terrible heat. He thought of his wife and son. He thought of the man who had saved him, the man who did not want to die in the sun.

I'll bury you where there's lots of water. No flowers, for flowers are red and yellow—like the sun. In the dark where the sun never shines.

The debt could not be repaid except by a small prayer.

—Continued from other side

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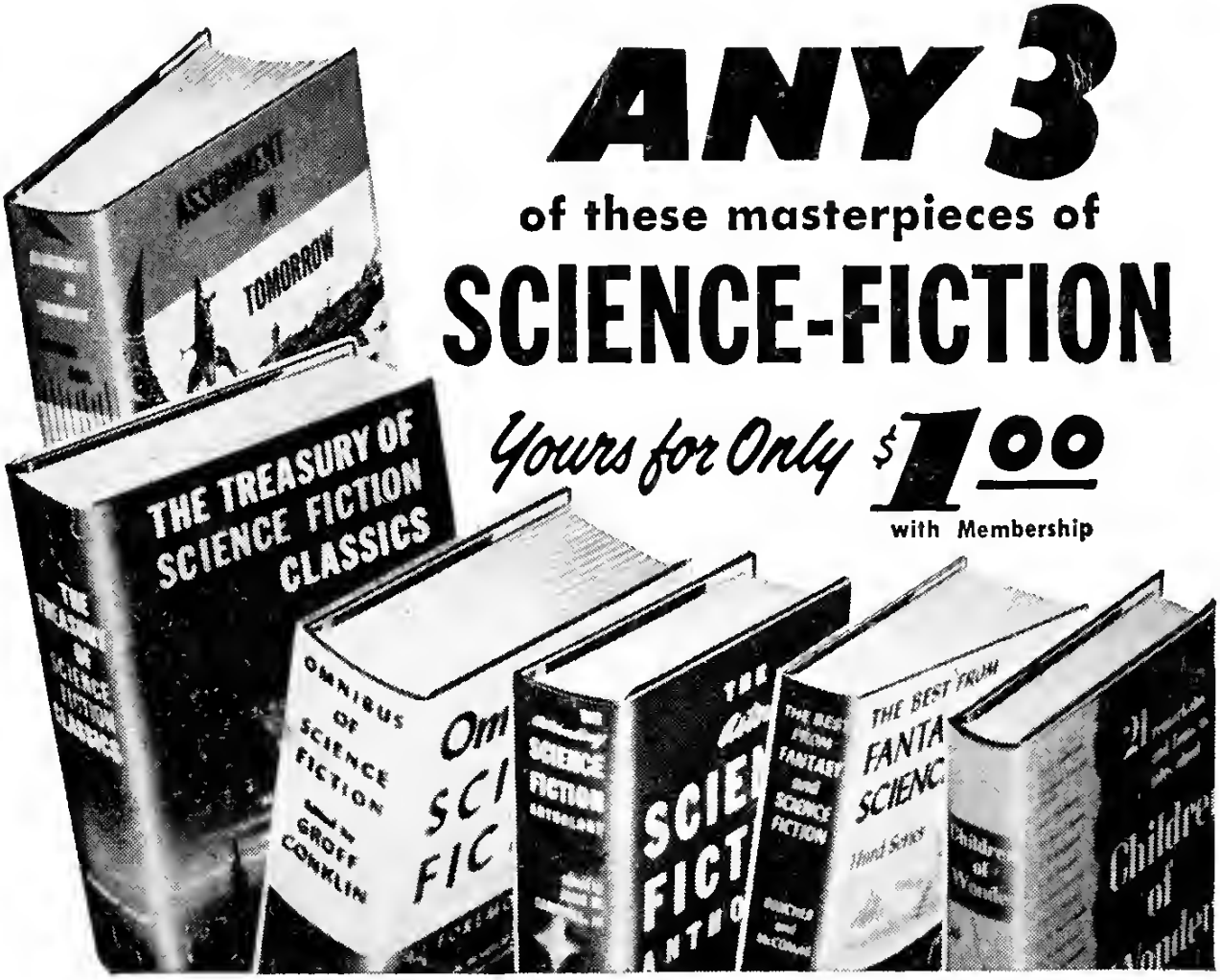
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